Clinical Lecture
ON
THE CAUSES OF INTERMITTING OR PAROXYSMAL PYREXIA,
AND ON THE DIFFERENTIAL CHARACTERS OF ITS SEVERAL VARIETIES.

Delivered Jan. 31st and Feb. 7th, 1879,

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(Concluded from page 619.)

THE next variety of intermitting fever to which I desire to draw your attention is that from—

8. *Lymphadenoma.*—If repeated observations be made with the thermometer, there will be found to be more or less fever at one time or another in probably all cases of this disease. In some patients the pyrexia is slight and only occasional; in others it is severe, and of a more or less hectic type; but the usual form is that of a fever with definite intermissions, the paroxysms being in some instances made up of three distinct stages of rigors, heat, and sweating. Some years ago I recorded in the Pathological Transactions (vol. xxi., p. 372) a very good example of this disease, in which the temperature during the febrile paroxysms rose to 104·8°; and quite recently you have had an opportunity of watching these febrile paroxysms from lymphadenoma in a patient who has been in the hospital. The paroxysms are usually quotidian, and may recur for weeks, and then for a time cease. During the attacks the enlarged lymphatic glands are often noticed to swell up and become tender; and although with the cessation of the fever this enlargement also subsides, each febrile attack usually leaves the glands somewhat larger than they were before. It is possible that, as has been suggested in the case of ague, the immediate cause of the accession of fever may be the propulsion by fits and starts into the blood of products of disease from the enlarged glands. The glands enlarge during the paroxysms, just as the spleen enlarges in a paroxysm of ague. With the paroxysms of fever, also, there may be associated a peculiar, sallow, anæmic colour of the skin.

9. *Syphilitic fever.*—Pyrexia of an intermitting form may result from syphilis at two different stages of the malady.

First, it may occur in connexion with the development of the eruption and the first appearance of other constitutional symptoms. In 1865 Dr. Edward Guntz called attention to the pyrexia accompanying, and sometimes preceding, the onset of constitutional symptoms in syphilis, which he designated "syphilitic fever." This fever, according to Guntz, can sometimes only be made out by the thermometer; but in other instances malaise, headache, and other indications of a febrile state, mark its presence; while occasionally he had met with a violent shivering fit. The exacerbations usually occurred in the evening; the temperature might then rise to 103·5°, while in the morning it was normal. This fever Guntz found to occur within sixty-five days of the date of infection, when no active treatment had been pursued, but not to occur at all when mercury had been employed, either internally or by frictions.[1] In the following year (1866) Lançereaux, in describing the eruptive stage of syphilis, observes: "Genuine accessions of fever are frequently added to these symptoms, characterised by heat, followed by more or less copious sweats. These accessions usually return towards evening or during the night, and in some cases very closely resemble quotidian, tertian, or double tertian ague. Cardan, Baillou, J. Frank, and Werlhof have even related cases of intermittent syphilitic fever." In a footnote he adds that, although several of the facts related in connexion with this matter may be questionable, it must be acknowledged that syphilitic fever has in some cases a great analogy with intermittent fevers, and refers to several cases in point.[2] Lastly, Mr. Berkeley Hill, after citing four cases of syphilis, at the outbreak of the eruption, in which he had observed the temperature in the morning to be 98° to 98·6°, but to rise in the evening to from 100° to 102°, goes on to observe: "Among Zambaco's cases is one in which the fever was particularly well-marked. It was that of a woman, twenty-six, who was attacked with pain in the limbs and slight fever. A fortnight later the fever became severe. Every day, at 5 P.M., she had a shiver, lasting fifteen minutes; then followed by heat and sweat. This ague fit was repeated during a week, after which a papular eruption appeared over the whole body, and other unmistakable signs of syphilis appeared. The fever continued unabated during seven weeks in spite of a scruple of quinine per diem and other febrifuge medicines. When mercury was given the fever subsided in four days, and in six had entirely left her. Her recovery of strength and appetite was so rapid that the patient left the hospital in a short time relieved of all her symptoms. Yvaren recites a case, and Zambaco inserts another case reported by Lasègue, where this intermittent character was well-marked.[3] It is obvious that in cases where the primary syphilis is concealed or denied, or where, as may happen, the patient may have been ignorant of its existence, the cause of the intermitting pyrexia may not at first be apparent.

But, secondly, pyrexia, not unfrequently of an intermitting character, may occur at a more advanced stage of syphilis, and particularly in connexion with syphilitic periostitis or rheumatism. In the second volume of the Transactions of the Clinical Society (1869, p. 89), Dr. Alfred Duffin published two cases in illustration of this fact, and in the following year a committee of the Society reported on nine additional cases (vol. iii., p. 170). In these cases the morning temperature was usually normal, but there was an evening exacerbation of from one to four or even five degrees. In some of the cases there were rigors and regular fits of nocturnal sweating. The fever was found to be rebellious to any but a specific treatment. Large doses of quinine were of no avail, but iodide of potassium affected the temperature curve within three days, or, at the outside, on the fifth day. In these cases the rheumatoid pains might readily be mistaken for the muscular and neuralgic pains of true ague, and so an error in diagnosis might arise. Moreover, cases have come under my notice which lead me to believe that fever of a similar character may occur in the advanced stages of syphilis independently of periostitis, but probably in connexion with syphilitic changes in some of the internal organs.

10. *Urinary intermittent fever.* — All of you have seen rigors following the passing of a catheter into the urinary bladder. These rigors may be nervous; they may be unattended by pyrexia. But not unfrequently the rigors are followed by pyrexia, which ends in copious sweating; and there are all the phenomena of a veritable ague. There may also be two or more paroxysms, more or less periodic, without any fresh introduction of the catheter. But what is well known as a result of passing a catheter or a bougie may also result from a stricture of the urethra, or from any cause of obstruction of the urinary passages in any part of their course—such as an enlarged prostate, a calculus in the ureter, the pressure of a new growth upon the ureter, &c. The paroxysms of fever in these cases are sometimes severe. They may assume what in true ague is known as the algide or pernicious form; that is to say, they are attended by great prostration, a tendency to collapse, and, it may be, delirium. Now what is the cause of these paroxysms of fever? Sometimes, no doubt, they are pyæmic; the patient dies, and the cortex of the kidneys is found studded with minute dots of pus or larger abscesses, and pus may also be found in other organs. But many of these patients get well, and the fever ceases at once, on the relief or the removal of the obstruction, and then it cannot be supposed that the fever had a pyæmic origin. Under these circumstances, it is not improbable that the fever is due to the absorption of some septic material produced in the decomposition of the urine behind the seat of obstruction.

11. *Hepatic intermitting fever.*—Patients with gall-stones

[1] "Das Syphilitische Fieber," Zeitsch. für Medicin, von Dr. Küchenmeister, Neue Folge, iv., pp. 192, 362.

[2] Treatise on Syphilis, translated by the New Sydenham Society, vol. i., p. 91.

[3] Syphilis and Local Contagious Disorders, 1868, p. 88.

blocking the bile-ducts—the hepatic, common, or cystic ducts—are very liable to paroxysms of intermitting fever, which simulate ague. The attack commences suddenly, very often with severe rigors; and there is considerable elevation of temperature, ending in sweating. The temperature may rise to 102° or 103°, or even to 105° or 106°; and there is sometimes delirium. Contrary to what is observed in ordinary ague and in pyrexia generally, the quantity of urea eliminated by the kidneys has been ascertained by Regnault to be diminished; while leucin and tyrosin are sometimes present in the urine. It is not difficult to account for these exceptional phenomena by the deranged action of the liver preventing the complete transformation into urea of the products of disintegration of the nitrogenous tissues. The sweating in the third stage of the fever is often profuse, but it may be absent. The duration of the paroxysm varies from three or four to twelve hours. As in malarious ague, the paroxysm is followed by a sensation of exhaustion.

The attack may be attended by pain of the nature of hepatic colic; at other times the patient complains of no pain, but with the fever there is distinct tenderness in the region of the gall-bladder, and in not a few instances there is neither pain nor tenderness. When the gall-stone has caused jaundice, this always becomes more intense with each paroxysm; the urine also is darker and the stools paler for some days after the attack. Even when there is no jaundice, the secretions are usually more or less altered in the manner indicated, for a short time after each paroxysm.

Patients very often have many attacks of the nature described—twenty, thirty, or more, extending over many months,—and become in consequence weakened and exhausted and depressed in spirits. The paroxysms are most common towards evening, and occasionally they recur with remarkable periodicity—every day, every alternate day, once a week, or at longer intervals. Moreover, it is to be remarked that large doses of quinine, although they will not prevent the attack, sometimes seem to postpone it.

The pathology of these attacks is somewhat obscure. Patients with impacted gall-stones are liable to ulceration of the bile-ducts, with secondary pyæmic inflammation of the liver, and no doubt in some instances the febrile attacks are thus accounted for. Indeed, in all cases of gall-stones attended by paroxysmal fever, it is right to bear in mind the possibility of such a grave occurrence; but, fortunately, in many instances pyæmic inflammation of the liver is not the cause of the paroxysms of fever. This is proved by the absence of other signs of pyæmia and by the circumstance that after a time the fever ceases and the patients get perfectly well on removal of the obstruction. In several instances I have known complete recovery after the paroxysms had lasted many months. Professor Charcot, of Paris, has suggested that the attacks are due to the absorption of some septic material generated in the stagnant bile, which is mixed with pus or mucus in the dilated bile-ducts above the obstruction.[4] This view approaches nearly to the pyæmic, but there are certainly no secondary deposits of pus. It is possible that in some instances the fever may be due to a movement of the stone in the narrow duct, just as we have found a paroxysm of fever to follow the introduction of a catheter into the urethra. This explanation is favoured by the pain (hepatic colic) which, though often absent, may usher in some of the febrile attacks, and by the circumstance that the paroxysms are almost invariably followed by a lighter colour of the stools, more bile in the urine, and the appearance or increase of jaundice. It may be added that these paroxysms of fever are comparatively rare in obstructions of the bile-duct other than from gall-stones. Still, I have observed them in two or three instances of catarrhal jaundice, and also in cancerous stricture, where, of course, they could not be occasioned by the irritation of a foreign body in the bile-duct.

12. *Intermittent fever from the use of morphia.*—Lastly, I must not omit to mention that an intermittent fever, closely resembling ague, has been found occasionally to result from the use of morphia. Attention has been called to this subject by Dr. E. Levinstein.[5] No other cause could be assigned for the attacks. No other persons living in the same house with the individual who took the morphia suffered from fever; and the attacks, previously obstinate, at once ceased on giving up the morphia. According to Levinstein many such cases have been observed, and he relates several.

Two forms of fever from this cause have been described—a slight and a severe. Both resemble malarious fever in their rhythmical character. The paroxysms may recur irregularly, but more often they are of a tertian, or sometimes of a quotidian type. The individual paroxysm lasts from four to ten hours, and is divided into three stages—rigors, heat, and sweating. The temperature may rise to 104°. The spleen in most cases is enlarged during the paroxysm; urinary sediments are common at the crisis, and in the severe forms there may be delirium. Moreover, with the paroxysms various neuralgias are common—supraorbital, intercostal, cardiac, &c.; and the attack is usually followed by more or less exhaustion and debility. In all this we have a striking resemblance to malarious ague. Quinine has been found at first to have some effect in postponing the paroxysms; but in spite of a persistence with the drug they soon return. Change of locality has been observed to exercise some favourable effect upon the attacks; while bad food and other depressing causes have had a contrary effect. But the attacks rarely cease until the practice of taking morphia is discontinued.

It is an interesting subject for inquiry whether other drugs than morphia can produce an intermitting pyrexia.

There are, I have little doubt, other causes of intermitting pyrexia, which I have omitted to mention; but I believe that in practice you will meet with few cases which will not come under one or other of the above heads.

[4] Leçons sur les Maladies du Foie. Paris, 1877, p. 181.
[5] Morphiumsucht. Berlin, 1877.

Lumleian Lectures

ON THE

PATHOLOGICAL RELATIONS OF THE VOICE AND SPEECH.

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LECTURE II.—PART II.

2. Loss or impairment of the laryngeal voice is one of the common incidents of many diseases which involve the larynx itself or its ministerial nerves. It is a frequent temporary consequence of catarrhal and other inflammations affecting the vocal cords and surrounding parts; it is a frequent and often abiding result of syphilitic or tubercular destruction of the vocal apparatus, or of involvement of the same parts in different forms of neoplasms. But the most interesting causes of pathological modifications of the voice are those which are referable to affections of the nerves and nerve-centres concerned in the actions of the larynx. Diphtheria and hysteria are common causes of paralysis of the motor, and less frequently of the sensory, nerves distributed to this part, the muscles which govern the tension of the cords being those which are most apt to suffer. It is not usual for the movements of the vocal cords to be compromised in cerebral hemiplegia, yet occasionally, no doubt, in such cases, the voice becomes enfeebled and monotonous. Much more frequently the central causes of laryngeal paralysis are such as involve the medulla oblongata, and especially, therefore, glosso-labio-laryngeal palsy, disseminated sclerosis, progressive muscular atrophy, and the development of tumours, syphilitic or other, in or about this centre. Further, any lesion implicating one of the pneumogastric trunks in the neck, or its superior or recurrent laryngeal branch, or any of the subdivisions of either of these branches, necessarily leads to paralysis of the muscle or group of muscles to which the affected nerve is distributed. The whole of this subject is one of great interest and importance, and might well repay analytical investigation. I shall confine my observations, however, to a single point, which

to the general physician is probably the most interesting of all—namely, paralysis in the domain of the recurrent laryngeal. It is well known that this nerve, from its long and tortuous course and peculiar relations to certain important structures, is specially liable to be compressed, stretched, or involved in the progress of material diseases of the root of the neck and upper part of the chest. Among these may be included inflammations of the pericardium and pleura, and especially of the connective tissue in the locality referred to, and goitrous tumours. But the commonest and by far the most important are aneurisms of the aorta or innominate artery, and tumours of malignant character. Recurrent laryngeal paralysis is generally unilateral, and attended with loss of motor power in all the muscles which are supplied by the nerve—namely, all the intrinsic muscles, excepting the crico-thyroid, which is specially the tensor of the vocal cords, and as such is concerned in the production of the higher notes of the voice. The powers of adduction and abduction are lost to the cord, as also is so much of its permanent tension as is due to the action of the thyro-arytenoid. If a larynx in this condition be examined laryngoscopically, the paralysed cord will be seen to remain passive about midway between the position it should assume in phonation and that characteristic of ordinary respiration, and motionless, except in so far as it is affected by the air passing over it during inspiration and expiration. The other cord, however, will be seen to execute its accustomed movements, and probably in phonation (being unopposed by its fellow) will be observed to revolve even beyond the median line, so as to come into actual contact with the paralysed cord, the glottis assuming an oblique position, and the healthy corniculum usually passing in front of that of the other side. In the bilateral form of the disease both vocal cords are of course paralysed, both assume the position characteristic of this form of paralysis, and the aperture of the glottis, which is open to about half the extent that it should have in quiet respiration, acquires, as von Ziemssen appropriately expresses it, the cadaveric position. The symptoms of recurrent paralysis are well marked, and, in association with the results of laryngoscopic examination, leave no room for doubt as to their cause. In the case of bilateral paralysis there is usually complete aphonia, in consequence of the permanently patent state of the glottis and the want of effective tension of the vocal cords; accordingly the voice is reduced to a whisper, and even that is accomplished with undue waste of breath and consequent difficulty. From the same cause the acts of coughing and expectorating are impaired in effectiveness. In unilateral paralysis the voice is also affected, but it is not necessarily reduced to a mere whisper. It becomes weak, impure or husky, and of heightened pitch; conditions explained by the combination—of a nearly closed glottis (which, while it permits of the escape of air in vocal puffs, permits also of more or less escape of unvocal breath); of vocal cords which are in different degrees of tension, and therefore cannot vibrate in unison so as to produce a true note; and of a vocal cord (the healthy one) which, on account of the increased effort which the patient makes to speak, is apparently rendered more tense than it would be under ordinary circumstances, and so tends to vibrate with unwonted rapidity. The voice sometimes acquires a falsetto character. There has been a general belief, I think, among English physicians, that difficulty of breathing also is one of the symptoms due to affection of the recurrent laryngeal nerves. At any rate, it has been maintained, and is, I believe, still commonly believed, that not only the loss of voice, but the paroxysmal cough and dyspnœa, which are so often observed in aneurism of the arch of the aorta, are the conjoint consequences of implication of the recurrent laryngeal nerve. It is now eight or nine years ago that several cases came under my care which satisfied me that this view is erroneous, and that the paroxysmal cough and dyspnœa occurring in these cases own a different origin to the loss of voice with which they are so frequently associated. Especially I had under treatment, within a very short period of one another, two middle-aged men who were suffering from carcinoma, and had also unilateral laryngeal paralysis. The first patient had cancer of the œsophagus, commencing a little below the situation of the thyroid body and extending for some distance downwards. He had also a few enlarged and hard glands in the lower part of his neck. In addition to the usual symptoms of œsophageal stricture, he suffered from hoarseness of voice, which had only come on recently and was unattended with soreness of throat or cough. On laryngoscopic examination, the cords were seen to be structurally healthy; but the right one moved freely, while the left was motionless, nearly in the position of closure. The patient remained under treatment for nearly three months, and then died suddenly from hæmorrhage, due to perforation of the left common carotid. At the post-mortem examination the left recurrent laryngeal was found to be entirely destroyed in a good inch of its course by involvement in the carcinomatous growth; yet he had had no difficulty of breathing from first to last. In the second case the patient had carcinoma of the retro-peritoneal glands, stomach, and liver, to which the symptoms in the earlier part of his illness were mainly due. Subsequently his lungs became affected, and the immediate cause of death was intercurrent pneumonia. On admission into the hospital his voice was a hoarse whisper, and it had been so for six weeks; but he had not had, nor had he then, either cough or dyspnœa. The right vocal cord acted well, but the left was motionless in the position of almost complete closure. The paralysis of the left vocal cord and the feebleness and hoarseness of voice were persistent up to his death, which occurred three months after admission; yet, although during the last three or four weeks of his life symptoms of pulmonary disease, with cough and expectoration, got developed, he never suffered from dyspnœa, far less from severe paroxysmal attacks of it. During the last two months he had a manifest difficulty in swallowing fluids, which had a tendency to pass into his windpipe. At the post-mortem examination, the lungs, trachea, and œsophagus were found healthy; but the left recurrent laryngeal was involved and lost in a carcinomatous tumour about as large as a filbert.

Now in both of these cases there was clear proof afforded by the autopsy that the patients were the subjects of complete destruction of the recurrent laryngeal, and it is certain that during life they had suffered from those symptoms which *à priori*, I think, we should be inclined to attribute to that lesion—namely, impairment of laryngeal intonation, and (at any rate, in one of them) difficulty in preventing the entrance of fluid into the trachea; but there was no trace of dyspnœa, either persistent or paroxysmal.

The next case I shall venture to quote is that of a patient of mine, a man of thirty-seven years of age, who died in the hospital about six years ago from aortic aneurism. His illness was of six months' duration, the last three weeks of which time were passed in the hospital. In the beginning he supposed he had caught cold; and he had from that time up to the day of admission steadily increasing dyspnœa and cough, attended latterly with expectoration. He was a spare man, with some duskiness of face and anxiety of aspect. The local indications of an aneurism springing from the aorta about the point at which the innominate is given off were quite obvious. His chief sufferings for some little time before he came into the hospital, and during the whole time he was under treatment, arose from difficulty of breathing, which was constant, but liable to sudden terrible exacerbations, during which he had a harsh metallic cough, lasting until his face became extremely livid, and relieved by the expectoration of muco-purulent fluid. His respiration was markedly stridulous; but there was never any tendency for food to go the wrong way; short-breathed though he was, his voice maintained from first to last its natural quality; and, indeed, there was no indication whatever of paralysis of the vocal cords. His death was due mainly to pulmonary congestion, with lobular pneumonia, consequent in great measure on long-continued laryngeal obstruction. At the post-mortem examination both recurrent laryngeals were found unaffected; but the trachea opposite the site of the tumour (which was of the size of a small orange, and arose from the transverse arch of the aorta at the point of origin of the innominate) was much compressed and narrowed; and already ulceration preparatory to the opening of the aneurism into the trachea was considerably advanced.

Another case of great interest has recently been under my care. The patient was a ship's steward, twenty-seven years of age, who came into one of my beds at the end of March, 1878, and died on February 1st last. He had had syphilis, but no other illness. About four months previously he strained himself in lifting a heavy cask, and a fortnight afterwards was attacked suddenly in the night-time with loss of voice. For this he went under treatment in the Valparaiso Hospital for six weeks. At first he was believed to be suffering from laryngeal catarrh, and was treated accordingly; but before he left he was told that his malady was not what it had been supposed to be, but aneurism.

When admitted into St. Thomas's Hospital there was distinct evidence of the existence of an aneurism in the presence of dulness and pulsation over a limited area beneath the inner part of the right clavicle, burning pain in the same situation, distension of the jugular veins on the right side, pain down the right arm and up the corresponding side of the neck, and weakness, impurity, and elevation of pitch of voice, associated with paralysis of the right vocal cord. There was no difficulty in swallowing, no dyspnœa of which the patient complained, and only slight cough, which aggravated the intra-thoracic pain. I shall not weary you with a detailed statement of all the varying phases of his illness, but will simply enumerate the more important points which it presented. About a week after admission he had a sharp and severe attack of pericarditis, in which for a time his life was despaired of. From this he recovered in the course of two or three weeks. About a month afterwards he had most intense abdominal pain, followed by diarrhœa. These symptoms lasted for three or four days, and recurred a few weeks later. For several months subsequently to the pericardial attack he considered that he was getting better; he felt, at any rate, easier on the whole. The pain in the arm, neck, and chest diminished, and his appetite and spirits improved. But the disease was extending. A systolic murmur, which had not been noticed at first, was detected beneath the inner extremity of the right clavicle. The aneurismal dulness and pulsation gradually increased in area, and extended beneath the manubrium to the left side. The right radial pulse became smaller and smaller, until it was almost imperceptible; the veins in the neck got larger, and slight œdema of the face appeared. Moreover, though he did not usually complain of shortness of breath, his breathing was manifestly stridulous when hurried or deep drawn. Sometimes also he had to sit up in bed, and had attacks in which he feared he should be choked. Occasionally he complained of a little difficulty in swallowing, and a tendency to choke when drinking quickly. At the latter part of December (by which time the aneurism had extended markedly to the left, and had caused prominence of the manubrium, with some infiltration and thickening in the lower part of the neck), he began to complain of pain down the left arm; and, although he had had cough, with occasional shortness of breath and sense of choking, for some months previously, it was now especially that he began to suffer from marked dyspnœa with stridulous breathing, and paroxysmal attacks coming on at first at intervals of several days, but subsequently several times a day, and lasting from a few minutes to an hour or more. In these he was compelled to sit up in bed, sometimes sat on the edge of the bed, struggled for breath with frantic efforts, got livid in the hands and face, with prominent and starting eyes, and an expression of the utmost horror; his pulse became imperceptible, perspiration poured from the forehead and face, and occasionally insensibility supervened. These attacks were attended or followed by cough, and more or less abundant expectoration. His death occurred quietly some hours after one of them. At the post-mortem examination an aneurism of the innominate artery, of the size of a cocoa-nut, and partly filled with clot, was found to have caused erosion of the manubrium, to have obliterated by pressure the right innominate vein, and in some degree to have obstructed the left; to have involved in its parietes and destroyed the right recurrent laryngeal nerve, and to have compressed and eroded both the trachea and the œsophagus, which tubes communicated freely with one another and with the interior of the aneurism through ulcerated openings, which were obstructed (so far at any rate as that of the aneurism was concerned) by the protrusion of laminated clot. The aorta was much diseased; and there were found at least three aneurisms besides: one, the size of half a walnut, in the transverse arch, which caused considerable stretching of the left recurrent; another, somewhat smaller, in the ascending arch; and another in the lower part of the thoracic aorta, which was obliterated by laminated coagulum. The right common carotid was completely obstructed, but the subclavian was pervious. The pericardial cavity was effaced by moderately firm adhesions.

In the former of the above cases of aneurism it will be observed that the recurrent laryngeals were not in the least implicated, and consequently there was no affection of the glottis, and no impairment of voice, but that the trachea was compressed by the tumour, and the patient suffered from paroxysmal attacks of cough and dyspnœa of the most aggravated character. In the latter case, on the other hand, almost the first symptom of which the patient complained was aphonia due to affection of the right recurrent; but it was not for some months that he began to show manifest signs of difficulty of breathing, which signs were evidently connected with the gradually increasing pressure of the aneurism on the trachea; nor was it until a later period still, at a time when doubtless the direct implication of the trachea had attained serious proportions, that paroxysmal attacks of dyspnœa and cough arose.

The several cases which have just been narrated show, in the first place, that destruction of the functional activity of one recurrent laryngeal nerve is attended with, of course, paralysis of the corresponding vocal cord (which can be recognised by means of the laryngoscope), with impairment of the musical quality of the voice, and apparently with some difficulty of swallowing, owing to the tendency of food to slip into the trachea, but is certainly not necessarily attended with stridor or dyspnœa; and, in the second place, that compression of the trachea involves stridor, and dyspnœa, which is often paroxysmal, and is liable to end in sudden death, but does not itself interfere with intonation or phonation, excepting in so far as it may render the voice weak by diminishing the supply of wind to the vocal organ. The exacerbations of dyspnœa, occurring in narrowing of the trachea, may be due in some measure to spasm of the muscular fibres of the affected part, but doubtless are referable mainly to accumulation of mucus in or below the point of narrowing, and to the difficulty of dislodging that mucus in consequence of the mechanical impediment existing there to the performance of an effective cough, and to temporary swelling of the mucous membrane.

The above discussion leads up to a question of some practical importance—namely, as to how far it is advisable, or not advisable, to perform tracheotomy for the relief of patients suffering from difficulty of breathing dependent on the pressure of an intra-thoracic tumour. Dr. Gairdner some years ago advocated this operation for the temporary relief of the dyspnœal attacks which so often complicate thoracic aneurism, and I believe his opinion has been largely adopted and acted upon. Now, on the assumption that the difficulty of breathing in these cases depends on pressure upon the recurrent laryngeal, and occurs therefore at the laryngeal orifice, tracheotomy is not only a justifiable measure, but one that it becomes our duty to the patient to urge upon him. But if it be clear that the impediment is not there, but in the trachea at a point below the lowest possible point of operation, the question assumes a very different aspect. In most such cases my own vote would certainly be given against its performance.

3. I proceed now to make a very few observations in reference to some of those affections of speech in which the mechanical operations on which articulation depends are interfered with by paralysis, spasm, or other conditions. As a general rule the greater the skill we attain in the art of so combining and adjusting the movements of particular groups of muscles as to make them the ready instruments of our will for special purposes, the more automatic do those movements become, and the less the need of the direct guidance of the mind; and the perfection of such skill is reached by the performer only when, losing sight of all intermediate processes, he becomes conscious of nothing in relation to his performance, save the will to execute and the actual execution. Indeed, the greater the direct attention we bestow on our own mechanical operations the less probably will be the accuracy of the immediate result. Thus, no healthy man has difficulty in maintaining his balance, and in walking evenly under ordinary circumstances; but there are few that manifest equal steadiness and precision when the having to walk over a narrow plank placed across an abyss diverts their attention from the end in view to the movements of their legs and the actions needed for the maintenance of equilibrium. And thus the accomplished pianist executes the most difficult passages with consummate skill so long as she thinks simply of the music to which she is giving life; but when, from nervousness or the mere desire to play with special accuracy, her attention becomes divided between the music and her fingers, she is only too apt to become inaccurate and to stumble. The same rule applies to the orator, whose fluency is liable to be checked, and whose language to become confused, when his mind wanders from the subject matter of his speech to the grammatical construction of his sentences and the careful selection of appropriate words; and to the ordinary speaker when his attention is diverted from the words he wishes to utter to the organs on whose action

utterance depends. It is due to this that soreness, and other like temporary conditions of the mouth, are often attended, not simply by a little thickness of utterance, which is their natural consequence, but by a tendency to leave out or transpose letters or syllables, and to stammer. It is due, in some measure, to this that the stammerer's peculiarity of speech becomes aggravated when he is under observation, or is at special pains to speak well, or is nervous. And there is no doubt that the enforced attention which they, whose organs of speech are more or less paralysed, give to the enunciation of their words, brings with it a tendency to blundering enunciation and to stammering.[1] It may be assumed, I think, that the condition here referred to is a more or less important factor in the defects of articulation which are manifested by all persons who suffer from paralysis or spasm directly interfering with the mechanical performance of speech.

(*a*) It is curious to observe how little comparatively hemiplegic paralysis of the organs of articulation, or even one-sided paralysis of these organs, due to disease of the motor nerves supplied to them, or of their several nuclei of origin, interferes with the function of articulate utterance. In either of these cases the patient can usually pronounce every literal sound without difficulty, but he manifests, perhaps, a slight degree of thickness or want of clearness in their articulation in connexion with one another. Doubtless, also, in some cases close attention will discover traces of the peculiarities of utterance which habitually attend the different forms of bilateral palsy. One of the most striking forms of general paralysis of the organs of speech is that which comes on gradually in the so-called glosso-labio-laryngeal palsy, and which may be developed more or less suddenly in hæmorrhage and other acute morbid conditions of the medulla. In the first stage of the one affection and in the last stage of the other, the patient may lose absolutely all power over the muscles concerned in phonation and articulation, and may become incapable also of the acts of mastication and deglutition. In glosso-labio-laryngeal palsy, the loss of speech is gradual, and varies in the order of its loss according as the lips, tongue, or fauces are first implicated. It is easy, of course, to understand that if the lips be paralysed, the labial consonants will be difficult or impossible of utterance; that if the tongue suffer, those which need the use of that organ will succumb; that if the soft palate cease to act, a nasal quality will be given to the voice; that if the laryngeal muscles be implicated, phonation will be annulled or modified in character. I am bound, however, to say that in this case, and in allied forms of disease which I have carefully examined in regard to articulation, I have often found that, even at a time when the patient's speech was a confused inarticulate babble, which only those who were in constant attendance on him could interpret, when the lips were scarcely capable of voluntary motion, and the tongue could not be protruded beyond the teeth, and deglutition and phonation were alike affected, he could still, when asked to repeat them, utter with fair distinctness and power all the separate articulate sounds which in combination he found it impossible to evolve. The utterance of the separate sounds, however, has generally been somewhat uncertain, so that I have left the patient's bed at one time with the impression that the labial consonants or some other class of letter-sounds were specially defective, and on my return have found them perhaps more distinctly pronounced than any others. I may point out that in testing patients who cannot pronounce complex groups of letters, and whose organs are not quite within their control, it is important to make them utter the letter-sounds pure and simple, or in easy combinations carefully devised for the occasion, and not to ask them to repeat the names of letters which, like those of *z*, *h*, *w*, and *y*, and many others, are not letters at all, but words compounded of several letters. There is generally a tendency, however, for the explosive consonants to be converted into the corresponding oral or nasal continuous consonants, and for an undue expenditure of breath, which adds a sibilant or wheezy character to all their utterances.

Other well-known affections which are attended with paralytic impairment of articulation are tabes dorsalis, disseminated sclerosis, general paralysis, and Sir W. Gull's cretinoid condition, occurring mainly among women. The peculiarities of utterance which attend these are not unlike those displayed in bulbar paralysis; nor do I think that there is any trustworthy distinctive difference in respect of speech between themselves. In all of them there is a more or less marked feebleness and indistinctness of utterance, which becomes more apparent, and probably blundering, when the patient gets excited or tries to speak rapidly. In all there is a greater or less liability of the lips to tremble during speech and immediately preceding speech, and for fibrillar tremblings or amœboid movements (if I may use that expression) of the tongue to take place when the organ is protruded. In all of them also there is a manifest difficulty in beginning words and syllables, which sometimes leads to imperfect utterance and slurring of the letters, but which also leads (especially when the patient tries to speak distinctly and to read aloud) to the divided or scanning enunciation which is so characteristic of some of these cases, and even to explosive enunciation. It may be added that the attempt to speak distinctly involves not only scanning enunciation, but increased effort on the part of the patient to put his muscles of articulation in motion, which reveals itself sometimes by needless violence and amplitude in the movements of the lips, sometimes by a curious general elevation of the upper lip attending the opening of the mouth, associated with deepening of the naso-labial sulci, elevation of the alæ nasi, and it may be with yet more extensive co-operation of the facial muscles. Further, there is a common tendency for such patients to speak with little modulation, and even in a monotone. Of course, in these, as in other cases, implication of the soft palate imparts a nasal quality to the voice, implication of the larynx may lead to more or less complete aphonia, and difficulty of swallowing is liable to supervene. I do not, by the above remarks, intend to imply that there are no clinical differences as regards speech between the different paralytic affections here grouped together. I believe that in many cases such differences exist; but I think that they are rather differences of degree than of kind, and not to be regarded as of specific value.

(*b*) The most interesting of the spasmodic affections implicating speech are chorea, and that condition, or those conditions, to which stammering or stuttering is due. In chorea there is generally distinct affection of speech, which in different cases may depend on spasm of the lips, tongue, larynx, or respiratory muscles, or on several or all of these factors combined. Thus the words are sometimes more or less indistinctly articulated, sometimes drawled out, sometimes uttered with explosive impetuosity, sometimes unfinished, being interrupted by a sudden spasm of the lips or tongue, some sucking or other sound effected in the mouth, a grunt or croak developed at the glottis, or a sudden inspiration or expiration. In rare cases, speech is altogether abolished. Recently I have had under my care a fairly intelligent little girl of about ten, who, while suffering from severe general chorea, lost for at least three weeks all capacity to utter articulate sounds and to phonate. Though understanding quite well everything that was going on around her, she remained absolutely dumb. During the same period she had unusual difficulty in retaining food within the lips, and also in deglutition.

Stammering is a too well-known disorder, coming on usually in childhood, but occasionally at later periods of life, probably in consequence of some sudden impression either on the general system or on the nervous organism. It is characterised by a sudden hitch in the act of speaking—a momentary or longer arrest in the flow of sounds. It is generally held that it is at the explosive consonants, *b*, *p*, *d*, *t*, *k*, and hard *g*, that the sufferer comes to grief; that the continuous consonants are for the most part pronounced readily; and that vowels are freely uttered. These statements, however, by no means express the whole truth in relation to the matter. For a little examination of a series of stammerers will show that, while some will perhaps halt especially at the labial, others especially at the lingual, and others especially at the guttural explosive consonants, all, or nearly all, are liable at times to stumble not only at any one of the explosive consonants, but even at those which are continuous, and some even will manifest an impediment to the utterance of simple vowels. When the check occurs at the lips, the evolution of the labial sounds is arrested by a sudden spasmodic closure of the mouth; when at the point of the tongue, this becomes fixed in the position belonging to the utterance of lingual sounds; when at the base of the tongue, this becomes spasmodically approximated to the palate. In some instances, and especially when the vowel-sounds are impli-

[1] For an interesting discussion on the above subject see a paper by Dr. Ord ("Notes on Cases of Nervous Disorder") in the St. Thomas's Hospital Reports, vol. iv.

cated, the spasm takes place at the glottis; and not unfrequently the stammering, whether occurring in connexion with vowels or consonants, is due to a sudden inspiration. But whatever part the spasm may affect primarily, the arrest may consist either in a sudden, simple, more or less prolonged spasm, or in a series of such spasms in rapid sequence, during which the implicated literal sound undergoes more or less frequent repetition. And, further, there is generally a tendency, especially if the spasm be prolonged, for a greater or less number of other groups of muscles to be involved. So that if, for example, the spasm commences at the base of the tongue, we may find in some cases that the mouth opens widely and remains in that position, the muscles of expression work convulsively, the glottis contracts, respiration becomes arrested, and finally spasmodic movements of remote parts become also excited. It would be easy to write a detailed description of some of these cases, and to show how individual examples differ from one another; but the final result would be, I think, to prove that their resemblances are far more important than their differences, and that the pathological explanation is the same in all. Speech, as I have shown, is, even in its mechanical details, a very complicated art; it requires, for its perfect performance, not only that the respiratory apparatus, the laryngeal instrument, and the organs of articulation shall uniformly co-operate with the greatest nicety under conditions which are ever varying, but, as regards the last organs especially, that they shall pass from one arrangement to another arrangement with unfailing ease, certainty, and rapidity. It is generally in connexion with complicated, rapidly varying muscular combinations, which are rendered easy of performance and more or less automatic by long practice, that momentary spasms or hitches are liable to occur and mar the performance. It is thus that occasionally the swordsman's arm is apt to become arrested in some particular attitude, the pianist has to give up his playing because of some recurring sudden inco-ordination, and the scribe especially is seized during his work with momentary spasm or cramp which checks or spoils his writing. And it is, doubtless, thus that spasm in the utterance of articulate language takes place, and that this spasm (although it may commence in any of the three mechanisms concerned in speech) almost always begins either in the organs of articulation themselves or in connexion with the mutual co-ordination of the several factors of speech—respiration, phonation, and articulation—and at the commencement of words or syllables. It has been asserted that stammering does not occur when the sufferer whispers or when he sings or intones. Neither of these statements, however, is accurate. Whispering is frequently attended with stammering, and, although the singing voice is usually free from it, even in aggravated cases, it undoubtedly sometimes suffers. In concluding this subject, I may remark that I do not pretend to throw any light on the treatment of this affection. Inasmuch, however, as it does not depend on any structural defect of the organs concerned in speech, local remedies, with the possible exception of the continuous galvanic current, are not likely to be of any service. It may, however, be improved, if not cured, by close attention to the management of the breath in speaking, by carefully practising those combinations of letters which are specially liable to give rise to stammering, and by the adoption of a deliberate and carefully balanced method of enunciation.

FOREIGN BODY IN THE HEART.

BY SIR JOSEPH FAYRER, K.C.S.I., M.D., F.R.S.

THE following is a more detailed account of the remarkable case of a bullet found in the heart to which I briefly referred at a recent meeting of the Pathological Society. I am indebted to Dr. Ewart's excellent descriptive catalogue of the pathological museum of the Medical College in Calcutta for such particulars as had escaped my memory. The man came under my observation and care at the Field Hospital, Rangoon, during the operations there in 1852.

Israel H——, a private in H.M.'s 80th Regiment, was wounded at the storming of the Great Pagoda at Rangoon, on April 14th, 1852, and was brought to the field hospital. The ball had entered the left shoulder, passing down into the chest. Blood and air were issuing from the wound, and did so for some days afterwards; there were all the symptoms of a wounded lung. He remained in the field hospital at Rangoon for a fortnight, and was then transferred to the convalescent depôt at Amherst, where he came under the care of Assistant-Surgeon White. His cough, expectoration, and emphysema had diminished. On his arrival at Amherst he was much better, and very hopeful of recovery. He is described thus:—"His cough was slight; there was no blood in the expectoration; there was great emaciation; small, quick pulse; clean tongue; the skin was cool; the bowels regular; the wound looking healthy; spirits good; there was dulness over the left side; slight respiratory murmur only below clavicle." On May 12th, the wound is reported as closed. Febrile symptoms then came on. On the 13th, he had a restless night from cough and dyspnœa; there was some bloody expectoration. In this state he continued till May 24th, after which he enjoyed comparative ease until June 3rd, when the dyspnœa and bloody expectoration returned. On June 11th emphysema extended from the situation of the original wound into the axilla and over the left side of the thorax. On the 14th he had profuse sweating; no respiratory murmur on the left side. He had become very weak and emaciated, and died on the 24th, having survived seventy-two days after the wound.

Post-mortem examination made by Mr. WHITE *six hours after death.*—Body much emaciated. The bullet had passed into the thorax between the third and fourth ribs, proceeding in its course downwards and inwards. The pleura was firmly adherent, and formed a cavity which extended from the first to the seventh ribs, and from the spinal column to the cartilages of the ribs. This contained about a pint of pus. The left lung was impervious to air throughout. A small portion of the cloth of the jacket was lying at the orifice of a canal situated about the middle of the lung. This passage stopped short near the course of the pulmonary veins, when all further traces of its passage were lost. On raising the heart a hard substance was felt at its apex, which, on examination, proved to be the bullet *in the left ventricle*, at its apex, crossed and recrossed by chordæ tendineæ and carneæ columnæ, which secured it firmly in position. The heart was perfect in every respect, and the only conclusion that could be arrived at was that the bullet must have perforated (perhaps by ulceration) one of the pulmonary vessels, and thus passed into the auricle, and so by its weight had dropped into the ventricle.

The above are nearly the words of the report in the catalogue, and no doubt give an accurate description of the case from the time the man left the field hospital at Rangoon, then under my charge, until he died at Amherst.

I was not present at the autopsy, but have often seen the heart in the museum of the Medical College in Calcutta, where it is one of many interesting objects.

I made some experiments later at the Medical College, to ascertain whether it was possible for a bullet to find its way into the ventricle in this fashion, and found that if the bullet were introduced into the larger vessels, it might be made to drop into the heart, thus confirming the view that it had been so in the case of poor Israel H——.

Granville-place.

THE SULPHUR-WATERS OF THE PYRENEES.

BY G. V. POORE, M.D., F.R.C.P.,
ASSISTANT-PHYSICIAN TO UNIVERSITY COLLEGE HOSPITAL, ETC.

(Concluded from p. 625.)

THE power which the sulphides possess of stimulating nutrition in scrofulous subjects whose nutrition is sluggish must have been often observed by anyone who has made a patient trial of their therapeutic value. At the Royal Infirmary for Children I have repeatedly ordered them for patients with enlarged glands; and although I have frequently failed to obtain any result, I have, at least as frequently, seen, as an immediate consequence of their administration, activity replace torpor and absorption or suppuration be quickly produced; these effects being usually accompanied by cutaneous hyperæmia and sometimes by a slight tingling of the skin.

Faith in mineral waters is far more easily produced when the alleged effect of the water is obviously due to the chief ingredient, and when the administration of the chief ingredient *per se* produces results identical with those which arise from taking a course of the waters. The fact, therefore, that the sulphur waters of the Pyrenees are found chiefly useful in those cases for which sulphides are administered at home is greatly in favour of the genuineness of the therapeutic action of the waters.

The majority of the monographs which deal with this group of waters claim for them that they may be used as a panacea against every known ailment; and the reader who has any yearnings after an approach to scientific therapeusis soon throws them away in disgust, having only learnt one important fact from them—namely, that patients visiting the Pyrenees are to be warned against persons of a dangerously sanguine temperament. There are of course exceptions, and amongst these may be mentioned the very excellent and temperate monograph on the Waters of Barèges by Dr. Armieux, and the scarcely less able treatise on Eaux Bonnes by Dr. Prosper de Pietra Santa. Andrieu, who published an essay on the Eaux Bonnes some thirty years ago, says: "The stimulating properties of the Eaux Bonnes make them of value in cases where it is necessary to rouse the torpid vitality of organs, and to contend with a chronic condition by impressing on the sluggish and obscure disease a quicker, freer, and more sharply marked course." The idea seems to have been held, at one time, that the best way to cure a chronic malady was to convert it into an acute one, and this power was claimed by Andrieu for the waters of Eaux Bonnes. Pietra Santa, in summing up the indications and counter-indications for employing these waters, makes use of the very words of Andrieu, and says: "Chronicity, asthenia, catarrhal conditions, the scrofulous diathesis, a lymphatic habit, laxity and habitual passive congestion of the tissues, an obtuse sensibility with slight tendency to irritability, the 'herpetic diathesis,' rheumatic and hæmorrhoidal affections, ... these are the conditions in which the administration of the waters of Eaux Bonnes is especially indicated. ..... A state of inflammation, an exaggerated nervous erythism, excessive pain, violent spasm, copious discharges, pyrexia, pronounced plethora, colliquative sweats,—these are the main counter-indications, absolute or relative, to the administration of these waters."

The waters of Eaux Bonnes have a great repute in the treatment of follicular pharyngitis, and in those forms of phthisis which are the result of the scrofulous diathesis.

Armieux, whose position as head of the Military Hospital at Barèges allows him to take an entirely unbiased view of the utility of the sulphur waters, is quite in accord with Pietra Santa. He says: "One can say in general that the waters of Barèges are most favourable for lax-fibred and lymphatic patients suffering from sluggish affections, for the lesions resulting from scrofula, and for traumatic lesions occurring in subjects without rallying power or reaction, in whom the fibrous tissues, the lymphatic glands, and the articulations readily swell, but are slow to subside."

In the military hospital at Barèges great success attends the treatment of the various scrofulous affections of bones and joints, and during the late war it was found that sluggish wounds occurring in scrofulous subjects soon became active when removed to Barèges for treatment.

Hitherto the probable effect of drinking sulphur waters has alone been considered, and we have found that the results obtained by drinking the natural water is distinctly similar to those which are brought about by taking artificially-prepared solutions, so that there is no necessity, in accounting for the action of the former, to make any reference to an inscrutable *divinum quid*. It must be remembered, however, that a visitor to the Pyrenees comes under other influences besides that which is exercised by the sulphur in the water, and chief among these are, the temperature of the water, which allows him to combine hot-bathing with water-drinking, and the height above the sea-level of the place where he sojourns while undergoing the cure.

That warm bathing is a valuable auxiliary in the treatment of many chronic ailments nobody will deny, and especially in those conditions occurring in scrofulous patients where the nutritive processes are sluggish. It has been said by Braun that "heat favours function," and there can be little doubt that a hot bath is admirably calculated to assist the action of the sulphide, which is given with a view of stimulating function. There is no reason to suppose that the sulphide contained in the water of the bath exercises any specific effect, although possibly the vapour of hydrogen sulphide which is inhaled during the act of bathing may excite some beneficial influence. For bathing purposes the chief merit of the Pyrenean waters is their heat, the contained sulphide being wholly inactive. The fact that the waters when drunk are taken hot may help to produce the desired effect.

Of the various methods of bathing and applying the waters it is not necessary to speak, for they do not materially differ from those which are in use at other baths. There are piscines, swimming baths, private baths, foot-baths, ascending and descending douches, inhalation rooms, and pulverisation rooms. With regard to the pulverisation of sulphur waters, it may be mentioned that Pietra Santa proved conclusively that the act of finely dividing the water brought about at once the oxidation of the sulphide into sulphate.

All the Pyrenean bathing resorts are at a considerable elevation above the sea-level, and it has been supposed that this fact has more influence on the welfare of the visitors than the sulphides or other ingredients of the water. Mountain air, like hot bathing and the sulphides, is a powerful stimulant to function, so that all three of these factors in the treatment of a patient in the Pyrenees work in the same direction. As regards height above the sea-level, Barèges stands first, with an elevation of upwards of 4000 ft.; then follows Cauterets, with 3000 ft.; next come in order St. Sauveur, Eaux Bonnes, and Eaux Chaudes, at a height of 2500 ft., 2400 ft., and 2200 ft. respectively; then Luchon, with an elevation of 2000 ft.; and, lastly, Bigorre, which is only 1800 ft. above the sea.

As a matter of course, these Pyrenean health resorts are used by a great variety of invalids, other than those of the scrofulous class. Whoever may expect to find benefit from a sojourn in a mountain climate, or from a systematic course of warm baths, will find it here as well as elsewhere. Patients suffering from rheumatism or gout, or from the effects of paralysis, come to the Pyrenees in great numbers, as well as a vast crowd of semi-invalids, who have lived too freely or worked too hard. To these must be added many more who make some real or fancied ailment the excuse for spending a month or six weeks in localities which are at once pleasant and fashionable. I have merely tried to indicate that class of patients which, more than any other, may expect to find relief from drinking Pyrenean sulphur waters.

Since it is very necessary to know something more about a health-resort than its elevation above the sea-level and the analysis of its water, I feel that a few words of description of the various places named will probably prove acceptable. There are certain points which they all have in common. Natural beauties abound on every side, and in the Pyrenees, as in the Alps, the wonders of nature form pleasing objects for excursions and occupation for the mind. The expense of getting to the Pyrenees is rather greater than that of getting to Switzerland, and the time occupied in the journey is rather longer. The expense of living is rather greater than in Switzerland, and the cost of locomotion is considerably more. All the bathing resorts are united by a magnificent road, the Route Thermale, as it is called; but there are not the same facilities for the transport of persons and baggage as are found in Switzerland. The public diligences are few in number and second-rate, and the only really comfortable mode of locomotion is by private carriages, for which the tariff is decidedly high. It is always advisable to ask what price is to be paid for a room before engaging one in an hotel, and the only way to guard against imposture is always to ask beforehand what price is to be paid for everything. The following passage, taken from Dr. Armieux's monograph, gives an excellent notion of some of the worse qualities of the inhabitants. My own short experience fully accords with that of the writer:—"Des Baregeois sont intelligent, leur imagination est vive, ils sont très près de leur intérêts, et ne se font aucun scrupule quand il s'agit d'obtenir le plus d'argent possible des services qu'ils rendent aux étrangers. Dans un pays où chacun est propriétaire, il n'y a pas de pauvres; cependant on voit beaucoup de mendiants, et les petits enfants sont instruits de bonne heure à tendre la main aux passants, avec cette particularité caractéristique que, quand on leur refuse, ils vous insultent, et que si l'on se fache ils vous jettent des pierres. L'argent gagné pendant la saison thermale n'est pas employé à améliorer le bien être de la famille et à amasser des réserves pour la morte saison. De déplorables habitudes se

sont introduites dans ces paisibles vallées et l'intempérance des deux sexes est un objet d'étonnement et de dégoût pour le voyageur."

As regards accessibility, Eaux Bonnes and Eaux Chaudes are each about twenty miles from Pau, which is the nearest railway station. Cauterets, St. Sauveur, and Barèges are at distances varying from five to ten miles from the railway terminus at Pierrefitte, while Luchon and Bigorre have each a railway station in the town.

Eaux Chaudes is a quiet place, situated in a very narrow gorge, and has all the disadvantages of places so situated—viz., great cold before the sun's rays reach the bottom of the gorge, great heat during the middle of the day, and incessant draughts. It is not a place for persons with weak lungs.

Eaux Bonnes is fashionable and lively, and is built into a rocky *cul de sac* with sides which are absolutely perpendicular. Many of the hotels have rooms literally hewn out of the rock. The centre is occupied by a garden where the band plays. The situation of the town is very picturesque, and the huge rocky summit of the Pic de Ger overhanging it forms a most striking object. Nearly every house in the place is an hotel or a lodging-house, and in the height of the season the population is almost dangerously dense.

Cauterets is a large, fashionable place, attracting thousands of visitors during the season. It is surrounded by hills on every side, but it is less closely hemmed in than Eaux Bonnes. Here, as at Eaux Bonnes, every kind of amusement is provided.

St. Sauveur is a quiet place, built on one side only of a tolerably wide valley. From it the Cirque of Gavarnie, one of the most interesting natural curiosities of the Pyrenees, is easily reached.

Barèges consists of one long, straggling, old-fashioned street, built on the side of a hill facing the west. There are several hotels, but few of them are really first-rate. Barèges is more frequented by genuine invalids, probably, than any other point in the Pyrenees. Owing to its elevated situation the climate is rough at times, and but little suited for persons with delicate lungs. There is a famous military hospital here, and the Pic du Midi and some of the grandest scenery in the Pyrenees are within easy reach.

Luchon is decidedly the most fashionable of all the Pyrenean health-resorts, and for beauty of situation it certainly eclipses all the others. It lies in a wide, well-watered and verdant valley facing the north, and being in close proximity to some of the highest mountain peaks it is as much frequented by tourists as by invalids. The hotels are numerous, and are mostly first-rate, and the visitors are largely composed of French and English fashionables. Few pleasanter places than Luchon for spending a summer holiday could be found.

Bigorre is situated on the Adour just where the mountain slopes subside into the plain of Tarbes. Unlike the places I have previously mentioned, Bigorre is not a mere bathing resort, or *ville d'été*, but is the capital of an arrondissement, and a town of some local commercial importance. Its permanent population is considerable, amounting to nearly 10,000 persons. Its sources of water are very numerous and varied in character, only a few of them being sulphur waters. Its hot springs were well known to the Romans. The town is picturesque, and is well provided with good hotels. Some of the winter residents from Pau take up their quarters in Bigorre for the summer months.

AMPUTATION OF THREE FINGERS; TETANUS; RECOVERY.

BY JOHN C. EATON, M.R.C.S.

(*Reported by* A. HARDING.)

CHARLES E. D——, aged seven and a half years, residing at Ancaster, Lincolnshire, a pale delicate boy, but who had had very little previous illness with the exception of fracture of the thigh, was going to school on the 9th July last, when a traction engine and two heavily laden trucks, used for conveying stone to Ancaster Station, were signalled to stop for a carriage to pass. During the stoppage the lad climbed upon the first truck to ride down. On wishing to alight, as the engine did not stop, he got down on the coupling irons and then on to the ground; as he could not run out between the trucks, he knelt down for the second to pass over him; when the first pair of wheels had passed he unfortunately raised his head, and was struck by the second axle and thrown with his left hand under the wheel. He was picked up and carried to the surgery.

On examination, the hand was literally crushed to pieces. The thumb was laid open the whole length, and the second phalanx fractured at the distal extremity. The first finger was laid open the whole length and dislocated backwards at the head of the second phalanx. The second, third, and fourth fingers were entirely crushed. The fourth and fifth metacarpal bones were crushed into small pieces, and the whole of the flesh was torn from the palm. The head was also very much bruised both by the axle and ground.

Thinking that perhaps the thumb and first finger might be saved, after the removal of the second, third, and fourth fingers and the fourth and fifth metacarpal bones, under chloroform, the damaged thumb-joint was resected and the dislocation of the first finger reduced; the skin from the back was brought round over the palm and held in position with sutures; the thumb and finger were sutured, and the ulnar and superficialis volæ were ligatured. The patient after operation seemed comfortable, and dozed; pulse 100. Milk diet ordered. He did well up to the tenth day, the hand being dressed with carbolic oil and washed with iodine. The ligature came away from the ulnar on the ninth, and from the superficialis volæ on the tenth.

Eleventh day.—Slept well; no pain; hand as before. Bowels relieved. Pulse 86 morning and night. Complained of his jaws being stiff, and was not able to swallow solids; but his mother, thinking he had got a little cold, did not let us know, although the lad said his neck hurt him two days before.

Twelfth day.—Restless through the night. Informed of stiffness for the first time this morning. Washed the hand well in iodine and water, and poulticed with linseed and carbolic oil. Bowels very hard. Ordered calomel with sugar (equal parts), four grains; rhubarb powder, four grains: and at noon, one grain of sulphate of quinine, and fifteen minims of hydrobromic acid, to half an ounce of water, every two hours. Two troches of morphia (one thirty-second of a grain) with each dose of mixture.—4 P.M.: Hand poulticed again. Bowels not relieved; half an ounce of castor oil given. He vomited frequently during the evening. Two drachms more of castor oil given at 6 o'clock. Yelk-of-egg and milk taken. Trismus well marked.—11 P.M.: Hand poulticed again; no pain. Slept from 8 till 11 o'clock. No twitching perceptible. Bowels not relieved; abdominal muscles very tense; pulse 96.

Thirteenth day.—Slept well; cheerful. No pain except when the hand is dressed. Removed several sloughs. Hand poulticed morning and evening. Tongue furred; pulse 96. Bowels not relieved; half an ounce of castor oil given.

Fourteenth day.—Slept well; spasmodic action of muscles perceptible; trismus still well marked; no difficulty in swallowing fluids; bowels relieved a little; injection of half a pint of gruel and an ounce of castor oil administered; bowels relieved again, but very slightly; aconite liniment ordered to be rubbed over affected parts. As the day advanced, patient became much worse; tetanic spasm almost continuous, back being so arched that only head and heels touched the bed. Injected one-eighth of a grain of morphia hypodermically; fourteen troches of morphia had been taken during the day; hand poulticed night and morning. Pulse: morning, 100; evening, 110.

Fifteenth day.—No sleep; spasm still continuous; jaws so firmly contracted that force was required to give medicine and nourishment. One-sixteenth of a grain of morphia given; hand treated as before; bowels not relieved. Pulse: morning, 104; evening, 96. Pupils still unaffected by morphia. Five minims of solution of morphia added to mixture; troches discontinued.

Sixteenth day.—Slept a little in night; spasm not quite so violent; pulse 116 in the morning; bowels not relieved; hand treated as before, looking very healthy; spasm more frequent as day wore on; pulse 110 at night; dozed a little; six drachms of castor oil given; no result.

Seventeenth day.—Slept well; spasm not so frequent or so strong; six drachms of castor oil injected in gruel; bowels relieved at midday; hand treated as before. Pulse: morning, 100; evening, 104. Dozed during day.

Eighteenth day.—Slept well through night; spasm

abating a little; bowels again relieved at midnight. Pulse: morning, 96; night, 100. Hand treated as before; reduced solution of morphia to three minims. A little more support taken during the day.

Nineteenth day.—Slept well; hand treated as before. Pulse: morning, 100; night, 104. Not so much pain; bowels not relieved; took more support; muscles still very rigid along the whole of spine.

Twentieth day.—Slept well; hand treated as before. Pulse: morning, 108; evening, 100. Half a pint of beef-tea and about a quart of milk taken during the day; bowels not relieved; more pain towards night; spasm very strong again; hand looking very healthy; pupils fairly dilated.

Twenty-first day.—Slept well; hand treated as before; pain increasing towards night. Pulse: morning, 100; evening, 104. Not quite so much support taken; bowels not relieved; six drachms of castor oil given.

Twenty-second day.—Slept well; spasms not so violent, about an hour between each; took support better; hand treated as before. Pulse: morning, 104; evening, 96. Bowels relieved early in morning; very cheerful when not in pain.

Twenty-third day.—Did not sleep so well; support taken freely; a great deal of pain through night and day. Solution of morphia increased to five minims; hand treated as before. Pulse: morning, 108; night, 100. Bowels not relieved; muscles still very rigid.

Twenty-fourth day.—Slept better through night; hand treated as before. Pulse 100, night and morning. Spasm not so violent; bowels not relieved; took fair amount of support.

Twenty-fifth day.—Slept well; spasm abating; hand treated as before; ate part of pigeon, and able to open mouth a little. Pulse: morning, 100; evening, 96. Bowels relieved; rigidity of muscles abating a little.

Twenty-sixth day.—Slept well; spasm not nearly so violent. Pulse 104. Ate a little fowl; hand washed with carbolic lotion (1 to 40), and dressed with lint; poulticed over dressing at night.

Twenty-seventh day.—Slept well; hand treated with carbolic lotion as before. Pulse: morning, 100; night, 108. Bowels relieved three times during day; spasm more frequent towards night, but of no length.

Twenty-eighth day.—Did not sleep so well; hand treated as before, and poulticed over dressings at night; very obstinate, and shouted a great deal, causing spasm. Pulse: morning, 100; night, 108. Bowels relieved twice during the day; tongue bitten very much during the night.

Patient slept with his mother from this date, and progressed favourably. On the thirty-second day a spasm was brought on by touching loose tooth. On the thirty-sixth day he was able to move his head backwards and forwards, lift himself up in bed by the aid of a swing, but could not bend to sit. Put his tongue more than half out on the thirty-eighth day. The morphia was discontinued altogether on the thirty-ninth day. He was able to walk with help on the forty-fourth day.

The patient went on well from this date. The granulations on the thumb did not heal very well up to the sixtieth day, when it was dressed with styptic colloid, after which it rapidly healed, and the lad is now in good health, and goes to school.

Ancaster.

NOTES

ON THE USE OF THE HÆMACYTOMETER IN ANÆMIA.

BY JOSEPH W. HUNT, M.D. LOND.,
PHYSICIAN TO THE WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL.

DR. GOWERS, by the introduction of his modification of the hæmacytometer, has opened up to the medical profession in this country a vast field for research into the pathology and therapeutics of diseases of the blood and the blood-making organs. He himself has made and published some observations in this direction.[1] Having for some time used his instrument in a large number of cases, I have been induced to state the result of my observations, with especial reference to the condition of blood in anæmia.

[1] Practitioner, July, 1878.

An extended use of the hæmacytometer only confirms the statement of those who estimate the number of red corpuscles in health as being about 5,000,000 in the cubic millimeter, or 100 in the two squares (Dr. Gowers' "hæmic unit") of the hæmacytometer; though an excess of 1,000,000, or a diminution to the same amount, is quite compatible with the most perfect health. The number of white corpuscles is very much more variable; but by taking the average of a much larger number of squares than suffices for the enumeration of the red corpuscles generally—that is to say, 150 to 200 squares—I have found the average not so inconstant as I at first supposed from a more limited examination. The maximum number of white corpuscles has been stated as ·3 per "hæmic unit," or 1500 in the cubic millimeter of blood; but they may frequently fall below this.

In all investigations with the hæmacytometer it must be remembered that we cannot attempt to compute by it the number of corpuscles in the body, but rather the corpuscular richness of the blood—that is to say, the proportion which the corpuscles bear to the serum of the blood; and again, that the number of the corpuscles alone does not represent their value, for as much perhaps depends upon their quality—i. e. the amount of hæmoglobin—as upon their quantity.

In ten cases of anæmia which I have carefully followed throughout the greater part of the course of the disease, the average of the red corpuscles at the onset of treatment has been 62 per cent., and in the three worst cases the average was less than 46 per cent., the corpuscles in the most severe case of all averaging as low as 42 per cent. None of these patients were laid up by their disease, all being able to walk to the out-patient room, and some of them a pretty considerable distance. All were young girls, of ages varying from fourteen to twenty-two years or thereabouts, and engaged as pupil-teachers, seamstresses, barmaids, shopwomen, or some such occupation.

One of the most striking facts brought out by the hæmacytometer was, as Dr. Gowers was the first to point out, that the corpuscular richness of the blood is seldom accurately represented by the appearance either of the skin or the mucous membranes. Thus in some patients, when the skin has been markedly pale and the mucous membranes equally anæmic, the corpuscles have averaged 80 to 90 per cent., or as much as they have averaged in my own blood when in a fair state of health. In apparently the worst case of anæmia I have met with, a young girl seen by me in consultation with my friend, Mr. Bunch, of this town, the patient was confined to her bed, from which indeed she could scarcely stir; the pulse was very frequent; there were numerous syncopal attacks, causing her medical attendant to be summoned more than once at midnight, as the patient was believed by her friends to be dying; there was frequent vomiting; the face was nearly as pale as the sheets which covered her, and the conjunctivæ were almost blanched except where one or two bloodvessels pursued their solitary course. Together with these symptoms there was some suspicion of hysteria. I examined the blood with much interest, and found the number of corpuscles not far from normal, so that the case was evidently not one of true anæmia. Under appropriate treatment, the patient was, to all intents and purposes, well in a fortnight.

Again, the corpuscles reach the normal amount some time before the patient's symptoms have disappeared or the normal colour returned, and, in some cases at least, long before the catamenia have recurred in their accustomed quantity and at the regular intervals; that is, as Dr. Gowers has shown, iron may increase the number of corpuscles out of all proportion to the increase in their hæmoglobin. In the greater number of my cases it has taken very little more than three weeks for the corpuscles to reach their normal amount, and sometimes much less than that time. Thus in one case of advanced anæmia, the corpuscles, which before treatment were as low as 60 per cent., reached 110 per cent. in two weeks, and after another week had advanced to 120. In a second patient the corpuscles rose in thirteen days from 42 to 98 per cent., but afterwards sank again on the iron being discontinued. On the other hand, some cases are much less amenable to treatment; and in one patient it took seventy-two days to raise the corpuscles from 48 to 96 per cent., but during this period the catamenia recurred three times, and the patient was one week without medicine.

The condition of the heart in most of these cases proved

the severity of the disease. In the majority there was well-marked dilatation, as expressed by the character of the impulse and increased lateral dulness. Mitral systolic murmurs were not infrequent, and, with I think one exception, there were distinct basic murmurs, and in most an intensified second sound was heard over the pulmonary cartilage. Carotid murmurs were heard in each case. These physical signs all improved under treatment, and speedily so, the improvement taking place apparently *pari passu* with the increase in the number of the corpuscles, and previous to any marked change in the outward appearance of the patient.

Absence of the catamenia, sometimes extending over a long period, was a marked feature in many of these cases, or if not entirely absent, they were very deficient in quantity and quality (as shown by their colour). The return of the catamenia to the normal condition occurred generally at a later stage in the period of recovery than the improvement in the other symptoms, but even this frequently took place before four weeks had elapsed. In one patient, in whom the catamenia had never appeared, the anæmic condition was cured in eighteen days, but neither then nor during the rest of the time that she remained under treatment did the catamenia appear. The return of the catamenia was almost invariably accompanied by a diminution in the number of corpuscles, or at least with a temporary discontinuance of any increase in their number. Thus, in one patient the corpuscles fell from 64 per cent. before the onset of menstruation to 58 after it, and at the second period from 84 to 74 per cent., at which time, however, the patient was also a week without medicine. In another patient the corpuscles were examined the day before menstruation recommenced, and though for the last four weeks they had been steadily increasing from 73 to 107 per cent., they had now sunk to 104. The catamenia lasted two days, and when the patient was again seen, four days after their cessation, the corpuscles had continued their rise to 118 per cent. In a third patient they rose in three weeks to 120 per cent., but when re-examined at the end of the fourth week, the catamenia had recurred slightly the week before, and the corpuscles had diminished in number to 106 per cent. Similar instances could be added. Possibly owing to the examination of the blood not being made every day during the catamenial period, the results may be less conclusive than they might otherwise have been; but, imperfect as they are, they appear in strange contrast to the observations of Dr. Duperié, who states that menstruation provokes the formation of a very considerable number of corpuscles. It is true that in one or two of my cases the gradual increase in the number of the corpuscles, noticed before the onset of the catamenial period, was continued when the blood was examined the first time afterwards; but, on the other hand, in no case where the corpuscles averaged the normal amount, or above this, did menstruation occur without a diminution in the number of corpuscles, either immediately preceding or found immediately after such period.

In all the cases mentioned above the treatment was the same, and consisted of good plain nourishing food without stimulants, open-air exercise, a cold bath in the morning when practicable, together with half an ounce to an ounce of compound iron mixture thrice a day, and aperient every night, mostly five grains of aloes-with-iron pill or aloes-with-myrrh pill. With regard to the number of the white corpuscles throughout the disease, I noticed that they were not reduced in anything like the same proportion as the red corpuscles when the patients came under treatment, but were generally about the normal number, and that their number was far less affected by the treatment pursued.

The marked effect of iron in increasing the number of the red corpuscles was well seen in a case of surgical anæmia. The patient, a young man of about eighteen years old, was admitted into the hospital under the care of my friend and colleague Mr. Vincent Jackson, with a fractured skull. A considerable portion of the skull was removed by operation. Secondary hæmorrhage from some meningeal vessel which could not be reached came on, at the commencement of which the corpuscles averaged 76 per cent. The hæmorrhage continuing, they decreased in a week to 50 per cent., when the common carotid was ligatured. The operation was a bloodless one, and the hæmorrhage ceased from that time forward, but notwithstanding this, the corpuscles still diminished in amount, till three days after the operation they were as low as 38 per cent. The patient was then ordered iron (ferrum redactum, five grains in the twenty-four hours) and good nourishing diet. In two days the corpuscles had risen again to 50 per cent., and in another fortnight, notwithstanding the profuse continuous suppuration from extensive wounds and the sloughing off of a small hernia cerebri, the corpuscles reached 100 per cent., and when again examined, five days after this, they were the same in number. The patient at this period was practically well, only remaining in bed for some superficial wounds to heal and for the recovery from hemiplegia due to the injury.

It is a point of considerable interest to observe the lowest number of corpuscles compatible with life. Dr. Gowers says that any patient with less than 20 per cent. is in imminent danger, and that, with one exception, he has not observed a lower percentage than 18 per cent., but this latter low average was maintained for some weeks in a case of pernicious anæmia. The exception referred to was that of a case of very profuse hæmatemesis, where the corpuscles numbered about 9 per cent. immediately before death. In one case of leucocythæmia, recorded by Sörensen, the red corpuscles were reduced to about 9 per cent.; but as the white corpuscles averaged as high as 10 per hæmic unit, the corpuscular poverty of the blood was not so profound as the number of red corpuscles suggests. In a case of purpura hæmorrhagica admitted into the hospital under my care, with epistaxis, bleeding from the gums, purpuric spots, and retinal hæmorrhage, the patient had only 18 per cent. of red corpuscles. Large doses of iron, turpentine, ergot, and aromatic sulphuric acid failed to produce any effect. In two days they had still further diminished to 14 per cent., at which period the prick with the lancet only yielded a little colourless serum, and it required considerable squeezing of the finger before any coloured blood could be obtained. On the third day after admission the corpuscles had sunk to 12 per cent., or rather less, at which number they remained till death took place on the fifth day. The white corpuscles varied from ·2 (the normal amount) in the two squares, on admission, to ·03, ·05, and ·08 on subsequent occasions. In a second case of purpura hæmorrhagica, when admitted, the red corpuscles were 75 per "hæmic unit"—i.e., per cent.,—and the white as high as 4·5. Owing to successive hæmorrhages, the number rapidly diminished; and when death took place on the fifth day, they numbered 23 per cent., and the white ·15. In a third case, the day before death, the corpuscles averaged 30 per cent., and the white ·6. Death took place rather suddenly, so that the blood was not examined again during life; but immediately after death the red had sunk to 24 per cent., and the white had risen to 2 per cent.

Wolverhampton.

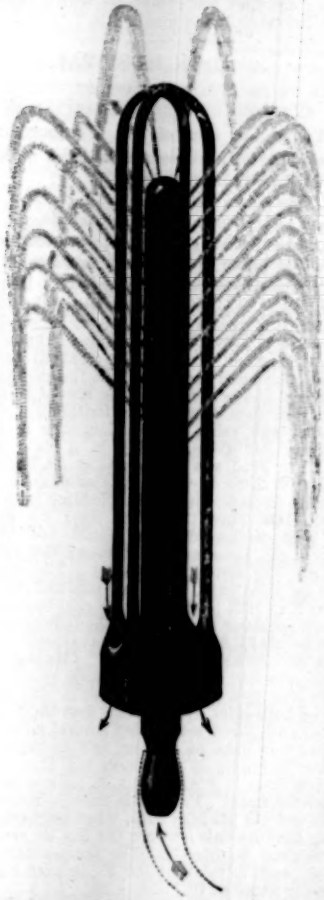
A NEW FORM OF FEMALE SYRINGE.

By HENRY GREENWAY, M.R.C.S.

THE want of an efficient instrument for bringing various forms of injections in contact with the entire surface of the vagina and the os uteri has long been felt, and many of the leading writers on the diseases of women refer to the inadequate means generally employed for this purpose. In order to cleanse the vagina, or locally treat its diseases by injections, it must be dilated in such manner that its walls may form a tube, the dilator itself offering as little surface as possible; and the fluid to be injected should be delivered freely and from many points. These requirements can be fulfilled by the invention now brought before the notice of the medical profession. The accompanying engraving gives a very good idea of the new appliance. It consists of four small-size rods, about six inches long, curved at their upper ends so as to meet at a central point, and connected at their lower ends with the outer margin of a cylindrical stock, the spaces between the rods being equal. This part may be termed the dilator. In the centre of the stock is a hole in which is fixed a vagina-tube, which extends upwards nearly to the point of the dilator, and downwards about an inch below the stock, and it has four rows of perforations which face the spaces midway between the rods of the dilator, each perforation being directed diagonally upwards On the lower end of this tube is fixed three or four inches of india-rubber tubing to receive a nozzle. The vagina-tube should be made of vulcanite, or some incorrodible material, but the

dilator may be made either of the same material or of hard and stiff metal. The other portions of the apparatus possess no novelty, and consist of a half-gallon tin reservoir, having an outlet in the bottom leading into a nozzle soldered on the outside. On this nozzle is fastened one end of an india-rubber tube, eight feet in length, the other end being fixed on one of the nozzles of a union tap. By connecting the other nozzle of the tap with the vagina-tube the apparatus is ready for use.

Directions for use.—Close the tap and place the injection in the reservoir, and hang it from a bedpost or a wall about seven or eight feet from the floor. The patient should then introduce the dilator and tube into the vagina as far as possible, and sit on a bidet or other vessel raised to a convenient height. By turning the tap the injection will flow freely, and, whilst flowing, the instrument should be moved to and fro, and occasionally slightly rotated. If only a small medicated injection be required, it may be forced into the vagina-tube from an india-rubber bottle furnished with a bone nozzle, instead of using the tin reservoir; but it is advisable to first cleanse the vagina with water if there be much morbid secretion. The vagina-tube and dilator may also be used in combination with any suitable form of injecting instrument. It will thus be seen that when fluid is injected into the vagina by this means, the jets are directed diagonally upwards, and, striking its walls, rebound in splashes to the opposite side of the passage (the perforated tube being surrounded by a free space), and the injection escapes from the vagina through holes in the stock. The arrows in the engraving show the course of the currents.



The dilators are of three sizes—large, medium, and small—and the whole apparatus is manufactured by Messrs. S. Maw, Son, and Thompson, of Aldersgate-street, London, who have satisfactorily carried out every detailed instruction. This invention, which has been patented in France, may, when made in suitable sizes, be used with advantage in any passage or wound requiring dilatation during irrigation.

Plymouth.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

MIDDLESEX HOSPITAL.

A SERIES OF CASES OF FRACTURE OF THE SKULL.

(Under the care of Mr. HULKE.)

THE following record is continued from page 155. In addition to their value as cases of fracture of the base of the skull that recovered, they all possess points of special clinical interest.

CASE 5. *Fracture of the base of the skull, implicating the anterior and middle fossæ; permanent blindness of one eye and deafness of the opposite ear; remarks.* — At 5.30 P.M. on April 8th, 1869, a carman, twenty-nine years of age, was admitted, conscious, but in a state of extreme shock. He had fallen off a van, one wheel of which was said to have grazed the right side of his head. In his right temple was a ragged wound, from which he had lost much blood; it was still bleeding. The soft tissues were so swollen that the wounded vessel was not readily discoverable, so the house-surgeon applied a compress, which stopped the bleeding. The auricle was much torn. Blood was oozing freely from the left external auditory meatus. The right eyelids were very swollen and ecchymosed. The eyeball was displaced forwards, and it was absolutely blind. The right arm and the left hand were bruised. At 7 P.M., by which time he had rallied greatly from the shock, the wound in the right temple bled very copiously, requiring the readjustment of the compress. An hour later, when Mr. Hulke first saw him, palsy of the right portio dura of the seventh, and of all three divisions of the right fifth cranial nerve was noticed. He could not thoroughly protrude his tongue, and he swallowed with much difficulty, remarking himself, "I can get anything into my mouth, but I can't get it down my throat." On inspecting his fauces, the right side of the velum pendulum palati appeared palsied. The wound and both ears were antiseptically dressed. As soon as the shock had passed off, his head was shaved and kept cool with ice.

The bleeding from the left external auditory meatus did not wholly cease until the fourth day, the fluid losing its bloody and assuming a serous character. The difficulty in swallowing continued without appreciable change till the fifth day, when a slight improvement was noticed; it slowly but ultimately wholly disappeared. His temperature at no time rose much above 98·5° F., and his pulse averaged 70 per minute. After remaining in the hospital several weeks he returned home, his right eye being blind, the optic nerve showing signs of atrophy, and his left ear quite deaf.

Epicrisis. — The occurrence here of fracture of the base of the skull, implicating its anterior and middle fossæ, can scarcely be doubted. The immediate and progressive proptosis, evidently caused by the extravasation of blood into the back of the orbit, and the immediate blindness of the eye whilst the proptosis was yet slight—before, therefore, it could be fairly attributed to excessive tension of the optic nerve,—make it in the highest degree probable that the roof of the right orbit was cracked, and the optic nerve mechanically damaged near the foramen opticum. The concurrence of palsy of the right portio dura of the seventh nerve, including its vidian branch, and of the three divisions of the fifth cranial nerve, together with the prolonged escape of blood and, later, of watery fluid from the left ear, admits

of a satisfactory explanation only on the supposition of a fracture passing from the right temple—the part of the skull directly subjected to the squeeze of the cart-wheel—through the right petrosal, and crossing also the petrosal of the left side.

In the next case, too, the copiousness of the hæmorrhage from the ears, and the severity of the cerebral symptoms, make fracture of base of the skull highly probable.

CASE 6. *Fracture of the base of the skull; recovery.*—A horse-keeper, aged thirty-seven, was admitted into Broderipp ward on Oct. 20th, 1874, with an injury to the head occasioned by a fall of 14 ft. off a ladder. He was insensible. Crossing the forehead, slantingly downwards from near the hair at the right to the inner end of the left eyebrow, was a long, ragged wound, and just above the occipital tuberosity was a second wound about two inches long. Blood was running from both ears, from the left copiously. The pupils did not act; the right one was dilated. At midnight, when Mr. Hulke saw him, his condition was not materially changed; the bleeding from the ears continued. Next day he was conscious, but lethargic; tongue furred; pulse 104; temperature 101° F. Pupils continued unequal. Ice was placed on the head. On the 22nd the pulse was 104; temperature 103°; skin hot and dry; great stupor; leeches placed behind both ears. On the 23rd the pulse was 80; temperature 101·4°; less drowsy, and said he felt better. The temperature continued nearly at this level during the next five days, and then declined to the normal line. The wounds healed. He left his bed in the first week in November, and went home in the middle of the month.

CASE 7. *Fracture of side and base; transient palsy of sixth left nerve; temporary diplopia and deafness; puffy swelling above and behind left ear; recovery.*—On April 3rd, 1878, a well-grown, healthy lad, aged sixteen, a teetotaller, fell from a ladder 20 ft., and pitched on the back of his head. Those present at the accident put some brandy into his mouth, and brought him to the hospital. He was insensible, collapsed, bleeding from the nose, and his pupils equal and active. No marks of injury to the head could be seen. About half an hour after being taken into the ward he vomited a bloody fluid smelling of brandy, and then, in a sleepy manner, exclaimed, "I feel better." In the course of the next hour he vomited twice; the second time the vomit seemed to be nearly unmixed blood. He then gave his name, his address, and age. The two latter proved, however, wrong. In the evening he rose from bed, and sat on its edge. Being put back into bed, he remained quiet till 4 o'clock A.M. (on the 4th), when he suddenly jumped out of bed, muttering unintelligibly, and groping as if to find something. Later in the morning slight oozing of blood from the left ear was noticed. At midday he swallowed a small quantity of beef-tea, but soon rejected it. A large, tender, puffy swelling was now noticed in the situation of the left limb of the occipito-parietal suture. In the evening he was restless, and again tried to leave his bed. On the 5th he had a restless night, but recognised his mother in the morning. When sharply spoken to, he put out his tongue in a sleepy way, and directly after seemed asleep. He had a quieter night, and on the 6th he was sensible, and answered questions pertinently when loudly spoken to. The left ear was deaf. He complained of pain in the back of the head. The puffiness of the scalp was less. His pupils continued equal and active, but he complained of his sight being confused, which was found to arise from palsy of the left rectus externus muscle. On the 12th deafness of the left ear was less, as was also the diplopia. On the 15th he heard a watch tick equally well with each ear, and the palsy of the rectus muscle had quite disappeared. He said he was quite well. On the 29th he was discharged from hospital.

CASE 8. *Fall of eleven feet on to the head; palsy of portio dura, and bleeding from the ear; meningitis; recovery.*—A French-polisher, aged fifty, was admitted into Broderipp ward at midday, July 26th, 1875, suffering from the effects of a fall of eleven feet downstairs two nights before, when in liquor. His face was flushed; its left side palsied. The left auditory meatus was blocked with dried blood. On the nose, left forehead, temple, and outer border of the orbit were grazes, and there was another graze above the left ear in the situation of the occipito-parietal suture. He complained of severe headache and dizziness. His bowels were bound. Temperature 99·4°; pulse 72 per minute. His head was shaved, and an ice-cap put on. Six leeches were applied behind his left ear. He was purged, and mercurial ointment was rubbed into his arms every third hour. On the next day the headache still severe. On the 29th the gums were slightly spongy; headache less. On the 31st he had a very restless night; temperature 102°. On August 1st he was delirious. The mercurial inunctions, which had been lessened to two a day on the 29th ult., were increased to one every four hours. On the 2nd he was less delirious, and the skin was cooler. From this time he slowly improved, and on the 24th of this month went home convalescent. He had not had any pain in the head for some time. The palsy of the left portio dura was less.

In this case, considering the nature of the injury—a fall, whilst in liquor, of eleven feet—the swelling of the temple, palsy of the portio dura, and bleeding from the ear, it is highly probable that the patient had sustained a fracture of the left side of the skull, extending through the left petrosal to the base; and that the symptoms which supervened on the second day were due to meningitis.

LONDON HOSPITAL.

TWO CASES OF FRACTURE OF BASE OF THE SKULL, WITH SYMPTOMS OF CEREBRAL IRRITATION.

(Under the care of Mr. HUTCHINSON.)

FOR the following notes we are indebted to Mr. Bedford Fenwick, M.B., late house-surgeon.

CASE 1. *Fractured base of skull; cerebral irritation; convulsions (eight days); delirium (eight days); recovery.*—J. W——, aged sixteen, a carpenter, was admitted May 9th, 1878. He had fallen about twenty feet from a ladder, on his head. Was discovered and taken to the hospital.

On admission the following notes were taken:—"Patient is insensible; the pupils act slightly to light; skin is warm and perspiring; pulse weak and slow; breathing quiet; blood oozes in some quantity from the left ear (internal); no marked bruising of the scalp." In the evening the pupils were dilated; the patient could be roused only with great difficulty, and then evinced great irritability, struggling to free himself, and using forcible language in a muttering tone. When left alone, he lay in a state of "general flexion." The head was shaved and an ice-bag applied.

For the next three days his state remained unaltered; he passed urine unconsciously; the bleeding from the left ear continued. On May 13th (fifth day) his head became forcibly bent backwards, and could not be flexed by moderate force; there was no trismus; the discharge from the left ear was serous in character. The head remained retracted for eight days, and then resumed its normal position. On May 16th (eighth day) he could answer questions, and recognised some friends. On the following morning the oozing of serous fluid from the left ear ceased. On May 19th (eleventh day) he had several "fits." He lost consciousness suddenly, and had an attack of clonic spasms, affecting at first only the left limbs, but after a day involving the muscles on both sides equally. At first the "fits" were few in number daily, and each lasted several minutes, but in a day or two they came on oftener, and lasted a shorter time. They thus increased in frequency till May 23rd (fifteenth day), when from 12 P.M. till 5 A.M. patient had a constant succession of them. From this time, however, they diminished in number till May 27th, when they ceased.

During the intervals between the fits he seemed sensible and recognised his friends. The temperature appeared to rise before each fit to about 100° F., or even higher. It was occasionally noted at 103° after a fit.

On the evening of May 27th (nineteenth day) he became very noisy, and in twenty-four hours was wildly delirious, shouting out scraps of songs &c., and interrupting them to beg that he might be killed and put out of pain. He was with difficulty kept in bed. He continued in this state till June 5th (twenty-eighth day), when he recovered consciousness.

The treatment consisted in keeping an ice-cap on his head, and in giving occasional doses of chloral and purgatives; finally, one grain of calomel was given three times a day.

Profuse diarrhœa came on upon the twenty-fifth day, and was not checked. It ceased as soon as the patient became sensible (on the twenty-eighth day).

On June 6th (twenty-ninth day) he was sensible and quiet, and complained of great hunger. From this date he convalesced rapidly, and in a fortnight was discharged to the country, it being noted—"Pupils are equal, and act to

light; he is quite deaf on the left side; there is no facial or general paralysis; general health is good; memory is good."

Seen some months after, he appeared in perfect health, but absolutely deaf on the left side.

Remarks.—The above case is noteworthy as one in which recovery ensued after severe injury, for it must be supposed that unconsciousness for eight days, retraction of the head for eight days, convulsions for eight days, and maniacal delirium for eight days, are strong evidences of severe cerebral lesion, wherever that lesion be localised. Another interesting feature of the case consists in the periodicity, each marked symptom lasting almost precisely eight days.

CASE 2. *Fractured base of skull; cerebral irritation; delirium; neuro-retinitis and hæmorrhages; recovery.*—A. B——, aged twenty-one, a baker, was admitted Oct. 26th, 1878. He had fallen about fifteen feet, striking his head on a ledge. He was found unconscious and taken to the hospital. On admission patient was nearly unconscious. He could be roused, but with difficulty. He lay quite motionless, breathing slow, not stertorous. There was free bleeding from the left ear (internal). The pupils acted to light. Skin moist and cold. Pulse slow, slightly irregular. An ice-cap was applied to head. One drop of croton oil was administered, and hot-water bottles were put to the feet. Reaction soon set in. The next day (Oct. 27th) he assumed a state of general flexion. It was very difficult to rouse him, and when roused he was extremely irritable, swore and struggled. A slight drooping of the left eyelid was noted. Hæmorrhage continued from the left ear.

On Oct. 28th (third day) he became very restless, and in the evening was wildly delirious, shouting and struggling, cursing and swearing. There was now marked ptosis of the left eyelid, and a serous discharge from the left ear. Pulse was feeble and slow (57). Thirty grains of chloral hydrate were given every two hours till sleep was procured. He slept for some hours, and on awaking was quiet. He gradually improved, slowly regaining consciousness.

On the 31st October (sixth day), the eyes were examined by opthalmoscope, and it was noted: "Veins remarkably tortuous; a peculiar haze seems to exist over parts of vessels, but all parts of the disc can be seen. The disc and the vessels on it have a peculiar glistening, whitish, streaky, or patchy appearance, but the details of the sclerotic ring, and within this a gray margin, can be made out, especially on the outer side. There is a well-marked physiological cup extending towards the outer side. In the left eye these points are not so evident as in the right. The serous discharge from the ear has stopped. Ptosis of left eyelid is marked." Patient's general mental condition went on steadily improving during the first and second weeks of November, though he still retained vague ideas about his accident, and his movements since then. He was found to be very deaf on the left side; could only distantly hear a watch pressed to the left ear; on the right side he could hear the watch held fifteen inches away.

His eyes were constantly examined. On Nov. 14 (twentieth day), it was noted: "There are now well marked evidences of neuro-retinitis. The left disc shows swelling and streaky hæmorrhages. An effusion of whitish colour now extends round the yellow-spot region, so that the latter shows up almost as a cherry-red spot. The right disc shows spots of whitish lymph, hiding vessels, but no hæmorrhages; yellow spot almost cherry-red. His sight is apparently pretty good, as tested by letters, cards, &c., seen through a + 6 or 8 for distance; near vision not tried. Right eye reads newspaper with + 5; the left cannot quite manage it. He says that his sight previous to the accident was quite good, excepting that he could not read at night for any length of time."

"Nov. 21st (twenty-seventh day).—To-day there is evidently a marked difference in the affection of the two sides of the disc in each eye. This is most evident in the right. The nasal half of the disc (real) was 'fluffy,' &c., while the yellow spot is comparatively free."

"28th (thirty-fourth day).—No hæmorrhages now in the left disc. General swelling. No lymph nodules. He remains deaf on the left side. No facial or general paralysis. His memory has returned in a great measure." Discharged to the country.

When he came for examination on Dec. 14th, 1878, right eye could read No. 2½ Snellen's test types, the left No. 3½. With + 8 he could read 1½ Sn. with each eye. The eyes probably were somewhat under the influence of atropine. V $\frac{3}{4}\frac{3}{9}$, with + 8 $\frac{3}{4}\frac{3}{9}$.

Feb. 15th, 1879 (without any atropine).—Vision with each eye $\frac{3}{4}\frac{3}{9}$, with + 10 $\frac{3}{4}\frac{3}{9}$. He could read No. 1½ Snellen's with either eye.

Remarks.—This case is of interest, first on account of the rarity of the optic nerve changes in connexion with symptoms pointing to fracture of the base; second, as a record of the sequence of the changes and their gradual development; and, last, as showing how, after such serious nerve-lesion, such complete recovery may ensue.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Suppurative Phlebitis following Cystitis.—Spontaneous Resolution of Tumours.—Subperiosteal Tumour.—Spontaneous Disintegration of Calculi.—Nerve-centres in Hydrophobia and Tetanus.—Cerebellar Apoplexy.

AN extraordinary meeting of this Society was held on the 29th ult.; Mr. J. Hutchinson, President, in the chair. Several specimens were shown; the chief discussion being that upon the occasional "spontaneous resolution" of new growths, apparently malignant in character. It arose out of a case contributed by Dr. Gairdner, and shown by Dr. Coats; Sir James Paget and Dr. Wilks joining in the discussion. Dr. Ross, of Manchester, also showed many microscopical preparations from cases of hydrophobia. Before adjourning, the President stated that at the next meeting an important communication would be received from Mr. Cheyne and Mr. Lister upon the occurrence of micrococci in wounds kept antiseptic; and also that M. Parrot, of Paris, would exhibit specimens of osseous lesions in hereditary syphilis.

The PRESIDENT, having intimated that the meeting had been convened on account of accumulation of business, said that before commencing it he was sure he would be permitted to allude to the sad event which had recently occurred, and which must be uppermost in the minds of all present members of the Pathological Society, who knew well how Dr. Murchison had worked for it, how for twenty years his attendance at the meetings had been most punctual, how he had contributed most valuable papers to their Transactions, how he had served as their Secretary, then as Treasurer, and (it seemed almost yesterday) as their President. He felt that it would not have been fitting to have allowed this opportunity to pass of expressing the sense of sorrow the Society felt at his loss. To many it was the loss of a personal friend, whilst pathological science lost in him one who pursued it in a most single-minded and unselfish way. He trusted they might long emulate his example and cherish his memory.

Mr. WALSHAM exhibited specimens of Suppurative Phlebitis following Cystitis. The case was one of compound fracture of the tibia and fibula, admitted under his care into the Metropolitan Free Hospital. Cystitis occurred after retention from over-distension of the bladder; then followed œdema of the left leg, symptoms of blood-poisoning, and death in three days. The veins about the neck of the bladder and prostate were found to be thrombosed; those on the right side not purulent, but those on the left were purulent, the suppuration extending into the internal and common iliac veins to the junction with the right common iliac. Such an occurrence after cystitis was rare; it was not described in any works, but its pathology could be allied to cases mentioned by Drs. Wilks and Moxon, of suppuration in the pelvic veins following gonorrhœa. In the present case there was no reason to believe that the phlebitis was independent of the cystitis; it occurred on the opposite side to the fracture, and, moreover, was in direct continuity with that part of the bladder which was most intensely inflamed.

Dr. JOSEPH COATS (of Glasgow) exhibited, on behalf of Dr. Gairdner, specimens of Multiple Tumours, in which

some of the growths observed during life had disappeared before death. The patient, a healthy vigorous man, fifty-two years of age, was under the care of Drs. Thompson and Norris, of Dumfries. Swellings commenced on the surface of the body, first on the abdomen, about fourteen months before death, and the subsidence of some and development of others were noted. One of the first to appear, and the largest, seated in the abdominal wall just above the iliac crest, and examined at intervals, disappeared entirely three or four months after its being first noticed. Others also changed in like manner. Dr. Gairdner saw the patient towards the close of his illness, and noted the extensive dissemination of these tumours, mostly subcutaneous, all over the body. He died shortly after from general exhaustion, much prostrated by attacks of vomiting. Dr. Thompson examined the body, and sent the specimens to Glasgow. In addition to the subcutaneous growths, many tumours occurred in the connective tissue of the abdomen; there were several in the fatty capsule around one of the kidneys; and on the other side the suprarenal body was replaced by a tumour which had completely broken down in the centre, which was occupied by blood-clot; other of the growths were similarly softened. One growing in the intestinal wall nearly occluded the bowel; many were found in the mesentery. They all had a lymphoid structure. Dr. Coats suggested that the tendency to softening and hæmorrhage which many of them showed might explain the gradual absorption during life of some of them. The specimen was, at Dr. Gairdner's and his own wish, referred to the Morbid Growths Committee.—The PRESIDENT said the case was unusual and interesting, not so much from the multiplicity of the growths, as from the fact of the total disappearance of some of them, and their lymphoid nature.—Dr. N. MOORE asked if the blood were examined. In a somewhat similar case as regards the nature and distribution of the tumours, there was an excess of leucocytes in the blood.—Dr. THIN in 1873 saw a case in Hebra's clinique of multiple growths of like nature, in skin and in connective tissue. Some of these were subsequently examined in Paris by Ranvier, who described them as lymphoid in nature. Dr. Thin, however, suggested that the structure conformed to simple inflammatory tissue, and thought that a case lately described by Duhring in America, and styled by him "inflammatory neoplasm," belonged to the same class.—Sir JAMES PAGET said that Dr. Gairdner had mentioned the case to him, and he thought it belonged to an unusual class of cases (which, on research, might be found to be more numerous than was imagined), where growths, supposed to be malignant, had disappeared during life. He had himself seen three such cases. The first was that of a young gentleman with lymphadenoma, involving the axillary, inguinal, and cervical glands. He also had paraplegia. Towards the close of life, when he was gradually wasting, nearly the whole of the glandular enlargement in the axillæ and groins completely disappeared, and that within a very few days. But, at the same time, increasing dyspnœa pointed to an increase in size of the mediastinal glands, from which he shortly died. Another case was mentioned by him some years ago in his lectures at the Royal College of Surgeons. It was a case of a large soft "cancer" (it would now be called medullary sarcoma) on the shoulder, with several smaller masses on the arm, neck, and in the groin. After a time the mass over the deltoid sloughed, and during the illness connected with this sloughing nearly the whole of the masses in neck and axillæ disappeared. The man's health improved so that he resumed work. Then other tumours appeared from which he died. In this case masses of new growth of considerable size had disappeared. The third case was that of a gentleman with a large mass of what seemed to be medullary cancer of an undescended testicle, involving the bladder and rectum. Treated by liquor potassæ and iodide of potassium, he improved so much that in six or seven weeks the tumour could no longer be felt through the rectum; only some slight induration remained. At the end of eight or ten weeks the growth was again renewed, but a second time it disappeared; and so again a third time it came and went. Once more it grew again, and, death taking place, examination showed an extensive growth of medullary cancer in the testicle and spermatic cord, and also in the abdominal glands. Sir James said the question was well worthy of study by those who could afford the time for searching through the literature of the subject. He had no doubt that several cases would be found to have occurred.—Dr. WILKS also thought that analogous cases might on inquiry turn out not to be so rare as was supposed. At the present time there was under his care at Guy's Hospital a girl who had several tumours on the body, all of which had disappeared with the exception of one on the arm. He thought they were lymphatic in nature—a view confirmed by the readiness with which the arm inflamed after a puncture—as mentioned by Dr. Curnow in his recent lectures at the College of Physicians. Many years ago he showed to the Society a patient who presented several softened tumours under the skin. The case was probably of this kind, but no light was thrown on it at the time.—Mr. BUTLIN had recorded in last year's Transactions the case of a boy whose subsequent history he had described in the early part of the session. The case was one of multiple lympho-sarcomata; and the curious fact was then noticed that of the two testicles that were affected one (the right) diminished in size before death, the other continuing to increase. Afterwards, the pelvic glands on the right side were found to be much larger than the left, as if the subsidence of the growth in the testis took place at the expense of the glandular infiltration.—The PRESIDENT reminded the Society that last year, during the discussion upon lymphatic diseases, Sir W. Gull mentioned a case where large masses of growth had subsided under observation.—Dr. BARLOW had seen a case of lymphadenoma in a boy where the glandular enlargement in the neck and mediastinum was so great as to deflect the trachea to the side. The enlargement disappeared very quickly. He recalled another case of lymphadenoma, in which equally rapid absorption of a large mass in the neck took place, attended with pyrexia. His colleague, Dr. Stephen Mackenzie, had had under care a similar case, in which the tumours in the neck were rapidly subsiding under treatment by arsenic.—Dr. STEPHEN MACKENZIE confirmed Dr. Barlow's statement as to the extremely rapid subsidence of the growth under the arsenic, the patient himself avowing that the swelling disappeared in one night. Quite recently he had under him a patient with multiple subcutaneous nodules. Believing them to be syphilitic, he prescribed iodide of potassium; but later gave arsenic, when they forthwith began to subside most rapidly.—Dr. WILKS bore testimony to the remarkable influence of arsenic in many cases where all other remedies had failed.—Dr. COATS, in reply to Dr. Moore, said that he did not know if the blood was examined. His object in bringing the case before the Society had been completely fulfilled.

Mr. MORGAN showed a specimen of Subperiosteal Tumour of the Femur from a girl three and a half years of age. The child was first seen last October, with a history of pain in the right knee five months before, followed by painful swelling of the thigh. When seen the lower part of the right thigh was much enlarged and hot, the swelling giving the sense of fluctuation. Constant exacerbation and severe pain occurred, and determined him to remove the limb. Amputation at the hip-joint was performed, the abdominal aorta being compressed by the hand. The child made a good recovery. A sarcomatous tumour, into which several hæmorrhages had taken place, was seated beneath the periosteum of the shaft of the femur, but did not involve the epiphysis. The periosteum was thickened, and at the upper part it was ossified, whilst bands of fibrous tissue passed through the growth from the periosteum to the bone.

Dr. ORD exhibited some specimens showing Spontaneous Fracture of Calculi. The first were sent to him by Dr. Krauss, of Carlsbad. They were passed by a retired farmer of Breslau, seventy-eight years of age, who came to Carlsbad in 1873 suffering from gall-stones. His urine was then loaded with uric acid. During the following year he had symptoms of renal colic, and for a few days his urine was very scanty, and there were symptoms of uræmia, but it was not until the winter of 1874 to 1875 that he passed a large number of fragments of calculi of the size of a hazel-nut. Dr. Ord said that some of the calculi were perfectly spherical, but the majority were fragments of larger masses. Each fragment consisted of a central hard portion and a thin greyish crust. They consisted of urate of ammonia infiltrating an organic basis: in the outer part the salt was deposited in a molecular manner; in the inner it was more uniformly blended with the basis. They were evidently of acid formation, and Dr. Ord thought that their disintegration could not be due to a change from the acid to the alkaline state (as in other examples he had published), but to the process of "molecular disintegration" described by Mr. Rainey, due to a change in the density of the urine in which they

were contained. Mr. Rainey had shown experimentally, and Dr. Ord had confirmed this fact, that calculi undergo spontaneous disintegration when the fluid within which they are contained is allowed to become concentrated by evaporation. Dr. Ord also showed some calculi removed by Mr. Croft from the bladder of a man sixty-four years of age. These consisted of pure uric acid, deposited in three distinct layers of differing physical qualities, according to differences in the mode of infiltration of the organic matrix, the middle layers being very friable. In this instance fracture was probably determined by the attrition of the calculi against each other, being a third mode in which spontaneous fracture could take place. The fracture must have occurred some little time before the calculi were removed, the larger masses having a thin phosphatic crust upon them.

Dr. ROSS showed microscopical sections illustrative of the Pathology of Tetanus and Hydrophobia. The main changes in both diseases were found in the grey substance of the cord and in the grey nuclei on the floor of the fourth ventricle. The changes found consisted in dilatation and plugging of vessels and migration of leucocytes and of a granular material around the vessels. These changes were generally those described by Clarke, Dickinson, Allbutt, Benedikt, Coats, and Gowers. The vascular changes in the cord were observed on each side of the central canal, but also extended to the anterior and posterior horns. The cells in the columns of Clarke were generally injured, as well as those of the anterior horns, especially the cells of the median group. The grey nuclei on the floor of the fourth ventricle were similarly diseased. Changes were found in the cortex of the cerebellum in tetanus, and in that of the brain in hydrophobia, but their significance depended very much on the position to be assigned to colloid degeneration with relation to disease. If the colloid bodies were a transformation of myeline during partial hardening in spirit, then the changes found in both cases could not be quoted as evidences of disease.—Dr. TAYLOR urged that the "colloid" bodies were produced by reagents employed, especially spirit. He had found this to be the case in his own specimens, although it might require certain degrees of antecedent decomposition to cause the change to be produced. Still so convinced was he that they were not morbid products that he could not regard their presence as having any bearing whatever upon the morbid changes in tetanus, hydrophobia, and other nerve disease.—Mr. GOLDING BIRD said that he had in his possession a spinal cord from a case of tetanus, fatal after some months. He had kept the specimen for three years, and it presented no morbid change whatever. Certainly the cells in Clarke's column was perfectly unaltered.—Dr. ROSS had found the "colloid" bodies in recent specimens of myelitis examined in glycerine; and he could not agree that they were only produced by the action of the reagents.

Dr. ALLEN STURGE showed a specimen of Hæmorrhage into the Right Lateral Lobe of the Cerebellum. The patient was a man forty-three years of age, who died in seven hours and a half after the seizure, the first symptoms being giddiness and vomiting. The blood had forced its way into the third ventricle and lateral ventricles. The kidneys were in an early stage of Bright's disease. Cerebellar hæmorrhage is exceedingly rare. In his article in Reynolds' System, Dr. Hughlings-Jackson says that he had never seen a case. Dr. Broadbent records two cases in the Path. Trans. (vols. xii. and xv.), and Dr. Mackay, of Brighton, has recently recorded a case.

CLINICAL SOCIETY OF LONDON.

Treatment of Impermeable Stricture of the Urethra.—Unusual form of Ichthyosis.—Tracheotomy in Bilateral Paralysis of the Posterior Crico-arytenoid Muscle.—Lichen Scrofulosorum.—Rodent Ulcer of Scalp treated by Excision.

THE ordinary meeting of this Society was held on the 25th ult., Dr. E. H. Greenhow, F.R.S., President, in the chair. Several papers were read of varied interest.

A case of Lichen Scrofulosorum was shown by Dr. Crocker, and one of an unusual form of Bromide Rash by Mr. Parker. Dr. Sémon exhibited the two cases referred to in his paper, and also an ingeniously contrived apparatus for demonstrating the action of the laryngeal muscles.

The PRESIDENT, on taking the chair, said:—"Gentlemen,—I cannot proceed to the ordinary business of the evening without briefly adverting to the great loss which we have sustained by the premature and sudden death of our distinguished associate, Dr. Charles Murchison, and I feel the more bound to do so because Dr. Murchison was one of the first hospital physicians who, at the invitation of the promoters of this Society, agreed to co-operate in its foundation. He was a member of our first council, and diligently attended its meetings at a time when the success and prosperity of the young Society depended mainly upon the judgment and care with which the objects for which it was established were carried out. At a later period he served the office of vice-president, and we must all recollect with what ability and urbanity he presided at our last annual meeting. Nor was Dr. Murchison only a useful member of our governing body; at a very early period he took an active share in the proceedings of the Society. At our second meeting he communicated some cases of death with high temperature in rheumatic fever as a supplement to a paper on that subject by Dr. Herman Weber. The debate which took place on that occasion first directed the attention of the medical practitioners of this country to this important subject. I am, indeed, aware that several cases had previously appeared in the weekly journals, and notably some reported by Dr. Ringer, to whom we owe so much in reference to the accurate observation of temperature in disease, but these cases had not obtained so much notice as they deserved. Dr. Murchison was also a member of the committee of this Society which investigated the influence of quinine in reducing the pulse and temperature of the body in high fever. Omitting several intervening communications, I may observe that the final paper in the last volume of our Transactions, upon the period of incubation in scarlet fever and several analogous diseases, was communicated by him. Dr. Murchison had received a thoroughly good medical education, and this was undoubtedly the foundation upon which he built his subsequent reputation. He was educated in Edinburgh and graduated with honours, having obtained a university gold medal for the excellence of his thesis. It generally happens that when a man has made a mark in any subject early in life, that subject is followed up in his subsequent career; but, curiously enough, Dr. Murchison's thesis was upon a surgical subject—tumours, I believe—and was founded upon the observation of cases during the time that he was house-surgeon in the Edinburgh Infirmary. Dr. Murchison was a pathologist in the true sense of the term, for he was not only well acquainted with the morbid products found after death, but had also studied carefully the various disordered processes in the living body of which these products are the result. He was also a very indefatigable, able, and intelligent clinical worker; the records of his cases, mostly dictated by himself, were models for clearness and brevity combined with completeness, no point of importance being omitted, and no irrelevant matter or useless words being inserted; he must, in fact, have made case-taking a subject of special study, in which we, the members of the Clinical Society, may advantageously strive to imitate him. Dr. Murchison was a most excellent clinical teacher, and practised the golden rule of teaching 'line upon line and precept upon precept.' The vast amount of work done by Dr. Murchison is well seen in the extent of his published writings. The mere list of his contributions to the Transactions of the Pathological Society occupies several pages of the index volumes; and, without referring to his other works, I may point to his classical treatise on Continued Fevers as being not only the most complete work that has ever been written on that important subject, but also as being an enduring monument to his memory; for no future writer can touch the subject without referring to his labours. I am sure that many who are present will cordially agree in the remarks which I have ventured to make. It seemed only right that some notice should be taken of the event which has removed from amongst us one of our most distinguished workers; and although I see around me several gentlemen who would have performed the duty better than myself, I regarded it as at once my duty and my privilege, as your president, to act as your mouthpiece upon the sad occasion. In conclusion, I would venture to say to my younger friends who are present, Do not follow Dr. Murchison's example as

regards the amount of work you undertake, for I am persuaded he very greatly overworked himself, but strive diligently to emulate his zeal for knowledge, and to perform with equal thoroughness whatever work you may attempt."

Mr. HULKE read notes of a case of Retention of Urine, caused by Impermeable Urethral Stricture, treated by tapping the bladder above the pubes, and later by external section of the stricture, a catheter passed through the bladder and a staff per penem, as far as the obstruction, being used as guides. The patient, forty years of age, was admitted into the Middlesex Hospital on Nov. 29th, with retention of twelve hours' standing, the bladder being distended to the umbilicus. He had been treated for stricture twelve years previously. It being found impossible to pass a catheter, Mr. Hulke emptied the bladder by aspiration above the pubes. Twenty-seven hours later, no urine having been passed, a trocar was passed into the bladder above the pubes, and a cannula left *in situ;* and on the third day this was substituted for a gum-elastic catheter. During the next few weeks the patient had two attacks of pleurisy. Several unsuccessful attempts were made to pass a catheter per penem, and on Jan. 3rd Mr. Hulke divided the stricture from the perineum, a staff passed through urethra up to the stricture and a catheter through the prostatic urethra from the bladder down to it being used as guides. The tough fibrous tissue was divided, and the catheter being withdrawn, the staff was guided into the bladder, and, lastly, another catheter passed over the staff into the viscus. The suprapubic aperture was allowed to close, and the case did well. Mr. Hulke remarked that the suprapubic tapping was selected in preference to Hunter's and Cock's method, because of the deviation of the urethra to the left. Not that this operation (first suggested by Hunter and then practised by Dittel) was intended to supersede puncture through the rectum, but that it was suitable for exceptional cases, such as this. It was not more liable to be followed by urinary extravasation, which did not occur in any of Dittel's cases, nor had Mr. Hulke found it to take place; whilst a provincial surgeon had made the same statement, based on an experience of seventeen cases. It admitted further of antiseptic precautions, and had the advantage of allowing the course of the urethra before and behind the stricture to be made out if division from the perineum became necessary. He had some little difficulty in finding the orifice of the prostatic urethra. The suggestion to use a catheter passed through the external wound as a guide to perineal section is made in a foot-note appended to the remarks made by Hunter in the collected edition of his writings.—Mr. MARSH said that in THE LANCET for 1838 Mr. Hursley records a case of impermeable stricture, where he performed suprapubic tapping, and, passing an instrument downwards through the stricture, managed by its means to draw upwards into the bladder a catheter passed per penem. Mr. Hulke's paper was very valuable as affording another means for treating a very difficult class of cases.

Dr. CROCKER read notes of a case of Ichthyosis of unusual character. The patient, a thin, delicate boy, ten years of age, deficient in intellect, was shown to the Society a short time ago. There was no family history of syphilis or phthisis, but both the child's thighs and left foot were much bruised. The warty growths spread from these sites. When seen the body was covered with a warty, horny growth from head to foot, more abundant on the right than on the left side, very little on the soles of the feet, but very marked on one knee. In some parts the growth was quite horny. Treatment by compound tar ointment had been partially successful. The case was regarded by Dr. Tilbury Fox as ichthyotic in character, an opinion confirmed by microscopical examination, which showed great cuticular hypertrophy, moulded on the papillary layer, the papillæ being for the most part free from hypertrophy (as in warts proper). Dr. Duckworth had had a similar case, where scleroderma was present in parts not the seat of the growth. The present case was of interest in connexion with the irregular and widespread distribution of the change, its horny character, its occurrence on palmar and plantar surfaces, and its association with the tubercular aspect of the patient.

Dr. SÉMON read a paper on Tracheotomy in Bilateral Paralysis of the Posterior Crico-arytenoid Muscles, with some remarks upon the disease. It was based on the sequel of a case which he had brought before the Society last year. (See Clin. Trans., xi., p. 141.) Although he had then advocated the early performance of tracheotomy, he had given his patient a fair trial with the direct application of electricity to the paralysed muscles, a treatment pursued daily from April last until Feb. 17th, 1879. It had given great subjective relief to the patient, who had not since had any suffocative attacks; but there was little, if any, change in the actual stenosis of the glottis. On the morning of Feb. 20th a message was brought to Dr. Sémon that the patient, who had been well up to the previous evening, had come home from his duty at midnight with some dyspnœa; that this had increased during the night; that he had become insensible in the morning, and was on the point of death. A neighbouring practitioner had been called in, but had stated that he could do nothing for the patient. Dr. Sémon found him *in extremis*, evidently dying from carbonic-acid poisoning. He immediately performed tracheotomy by a single incision, inserted a large tube, and started artificial respiration. It was not till after three hours and a half continuously and laboriously thus keeping up the respiration that the patient began to breathe spontaneously. Frequently blood had to be sucked out of the trachea. Ultimately the patient recovered, but his convalescence was retarded by the effects of the carbonic-acid intoxication. Dr. Sémon had brought the case forward mainly because it raised the question, "Under what circumstances and at what period of the disease is tracheotomy to be performed in these cases?" It had lately been stated by Mr. Lennox Browne that tracheotomy could be probably often avoided, because relief was afforded by milder remedies and methods. However, in Mr. Browne's own case illustrating this view, there was still considerable actual stenosis of the glottis, in spite of the disappearance of the subjective symptoms, and thus the patient was, as Dr. Sémon's case clearly proved, far from being out of danger. Dr. Sémon proposed the following general principle for the treatment of these cases:—In a case of bilateral paralysis of the posterior crico-arytenoid muscles, in which a considerable stenosis of the glottis has taken place and marked dyspnœa is present, unless *within a short time* not only *subjective* relief but an *actual* enlargement of the glottic opening has been obtained, then tracheotomy ought to be performed without delay, as a prophylactic measure, with a view to the subsequent removal of the tube in case any later therapeutical efforts should produce a real cure of the affection. Dr. Sémon showed another case where the bilateral paralysis was incomplete, the vocal cords coming completely together during vocalisation, but during deep inspiration the anterior two-thirds of the vocal cords remain close together, and the posterior thirds only separate, leaving a triangular space between their borders and the inter-arytenoid fold. This had never hitherto been described, and might be explained, by Ruhlman's recent physiological observations, to be due to the fact that whilst the outer fibres of the posterior crico-arytenoid muscles were paralysed, the inner fibres which rotate the processus vocales of the arytenoid cartilages outwards were intact. If, then, a secondary paralytic contraction of the antagonistic muscles set in, the result would be that seen in this case. This explanation was admittedly hypothetical, but its feasibility was demonstrated in the model illustrating the action of the laryngeal muscles, invented by Professor Brohl of Munich. Dr. Sémon said this incomplete form of paralysis was also present in Mr. Browne's case. In his own patient the dyspnœa was so great as to necessitate tracheotomy. Since their convalescence he had treated both patients with daily subcutaneous injections of sulphate of strychnia, but without any subjective or objective success.—Mr. LENNOX BROWNE said that in the case he had recorded strychnine had been given hypodermically for two or three months, and with great relief both to objective and subjective symptoms. He was alive to the importance of tracheotomy in such cases, but thought if manifest subjective relief could be obtained without it, it should be deferred, since the patient would have to wear the tube all his life; and after tracheotomy one was apt to leave off other measures. Since he read his paper he had had another case—a man fifty to sixty years of age, whose breathing was extremely noisy, and in whom hypodermic injection of strychnine produced marked improvement, varied by a relapse of the noisy breathing, but no suffocative attack on the occurrence of some catarrh. He did not think the hypodermic injection of strychnine, the introduction of which is due to Gerhardt, had yet had a fair trial.—Dr. DE HAVILLAND HALL, having had charge of Dr. Sémon's case during his absence, bore testimony to the great improvement in the subjective symptoms produced by faradaism. On one occasion, when

the man failed to attend for a few days, he was seized with a most severe attack of spasm, almost necessitating immediate tracheotomy. He fully agreed that, after other measures had had a fair trial, tracheotomy should be early performed. He inquired of Dr. Sémon as to the etiology of this case. The patient, when shown to the Society last year, had marked symptoms of locomotor ataxy, and it was suggested that the larnygeal paralysis was due to sclerosis of the nerve-centres. The ataxy is certainly progressing.—Dr. SÉMON said that the hypodermic injection of strychnine in doses of one-thirtieth to one-tenth of a grain had been tried in his cases, but with negative result. Nor did he know of any sure remedy. In some cases electricity had been reported to be useful. It had been carried out diligently for twelve months in his case, but with no real gain. In some syphilitic cases iodide of potassium had done good. When, however, the etiology was obscure there was no certain remedy. He intended to try mechanical dilatation by means of Schrötter's hollow bougie. He did not advocate immediate tracheotomy, but urged its performance after a fair trial of other remedial measures. As to the etiology of this case, he had not yet been able to think there was any connexion between the disease of the nerve-centres and the laryngeal paralysis, and he referred to an ingenious view put forward in THE LANCET on the occasion of his first bringing the case before the Society, to the effect that one of the recurrent nerves might be affected, the other suffering sympathetically. Charcot had recently pointed out that laryngeal attacks may form some of the initial symptoms of locomotor ataxy.

Dr. TILBURY FOX gave an account of Lichen Scrofulosorum. One of his patients was a lad aged seventeen, delicate and tuberculous. He had had hemiplegia and suffered from enlarged lymphatic glands. Four years ago he came to the hospital with ill-developed lichen circumscriptus, and improved under treatment; but six weeks after his return from the seaside he came back to the hospital with the disease in its present condition. The follicles were raised over large surfaces, but here and there were patches more raised than the rest, varying from a threepenny-piece to a crown-piece in size, of a faint red colour, and occasionally crusted. There was no itching, but after a time acne spots appeared. In these cases it was usual to find some pulmonary complication. They corresponded to Hebra's lichen scrofulosorum, but Hebra did not describe any disseminated papules. The acne spots came on later. In Dr. Crocker's case there were none. Its amenability to cod-liver oil was important.—Dr. CROCKER had only observed his case for a few days. The absence of acne spots was probably due to the short duration of the eruption, which commenced in small patches three-eighths of an inch in diameter, then enlarged and faded, leaving marked stains. There was no marked evidence of struma in this case, but the child's father and brother were phthisical.

Mr. M. BAKER read notes of a case of Rodent Ulcer of the Scalp treated by Excision. The patient had first been seen in July, 1873. There was at that time a painful ulcer over the left parietal bone, which had commenced in a pimple three years before. It was treated with nitric acid, and later with Vienna paste. In 1877 the ulcer had much increased in size, and the patient was exhibited at the Royal Medical and Chirurgical Society by Mr. Gaskoin. After this, in 1878, he was readmitted to St. Bartholomew's Hospital, and Mr. Baker excised half the ulcer in April. Where the pericranium was involved, the gouge was applied. A month afterwards the other half was similarly treated, and the resulting sore dressed with iodoform. Chloride of zinc paste was afterwards applied to a few superficial patches, but by December 12th the greater part was healed. Over the centre of what had been the ulcer were some suspicious points, and under the sterno-mastoid was a painless enlarged gland. Dr. Thin had described the microscopical characters of the ulcer in the last volume of the Pathological Society's Transactions. Mr. Baker added that he had recorded this case because he had hardly expected to do so much good by excision. The wound was not healed, it is true, but the patient was placed in the condition in which he had been five or six years ago.—Dr. FOX hoped the sequel of the case, especially as regards the swollen gland, would be brought before the Society.—Dr. THIN said that, of the two methods, the free use of the knife was better for removal of rodent ulcer than the method of scraping by a sharp spoon, for by the latter method the inflammatory changes set up voured the extension of the disease, epithelial cells thriving in the inflammatory plasma. In lupus, however, the inflammatory changes were beneficial. The occurrence of a swollen gland did not exclude the idea of rodent ulcer. He thought that as the distinctions between rodent ulcer and epithelioma became more clearly defined, it would be found that lymphatic infection occurred in the one as in the other.—Mr. BRYANT said the case was a good example of the value of local destruction of rodent ulcer, and he did not think it mattered what means were employed so long as that destruction was completely effected. A good blunt knife was often the best instrument for scraping away the diseased tissues.—Mr. BAKER agreed as to the importance of utterly destroying the new growth.

HEALTH OF LARGE ENGLISH TOWNS
IN THE EIGHTEENTH WEEK OF 1879.

DURING the last week 5324 births and 3314 deaths were registered in twenty of the largest English towns. The births exceeded by 142, while the deaths were 56 below, the average weekly numbers during 1878. The deaths showed a further decline of 215 from the excessive numbers in recent weeks; and the annual rate per 1000, which had been equal to 25·9 and 24·9 in the two preceding weeks, further fell to 23·4. The death-rate in these towns last week was lower than in any week since the middle of November last. During the five weeks ending last Saturday, the death-rate in these towns averaged 25·2 per 1000 against 24·9 and 25·2 in the corresponding periods of 1877 and 1878. The lowest rates in these twenty towns last week were 17·4 in Bristol, 18·2 in Portsmouth, 18·6 in Leeds, and 20·5 in Sunderland. The rates in the other towns ranged upwards to 24·9 in Leicester, 25·1 in Birmingham, 27·4 in Plymouth, 27·7 in Newcastle-upon-Tyne, and 28·4 in the city of Manchester. With reference to the high death-rate in the five last-mentioned towns, that in Newcastle-upon-Tyne alone appears to be mainly due to excessive zymotic fatality. The deaths referred to the seven principal zymotic diseases in the twenty towns were 423 last week, scarcely differing from the numbers in the two preceding weeks; they included 132 from whooping-cough, 88 from measles, 87 from scarlet fever, and 39 from fever, principally enteric. The annual death-rate from these seven diseases averaged 3·0 per 1000 in the twenty towns; it ranged from 0·8 and 1·0 in Portsmouth and Bristol, to 5·3 both in Sheffield and Newcastle-upon-Tyne, and 5·5 in Norwich. Whooping-cough showed the greatest proportional fatality in Brighton and Sheffield; scarlet fever in Salford, Newcastle-upon-Tyne, and Nottingham; and measles in Newcastle-upon-Tyne, Salford, and Norwich. Sixteen deaths were referred to diphtheria in London, and but 8 in the nineteen provincial towns; of the latter, two occurred in Norwich. Small-pox caused 10 more deaths in London, but not one in any of the nineteen provincial towns. The Metropolitan Asylum Hospitals contained 210 small-pox patients on Saturday last, against numbers declining steadily from 353 to 222 in the nine preceding weeks; only 36 new cases of small-pox were admitted to these hospitals during last week, against 47 and 50 in the two previous weeks.

SOUTH LONDON SCHOOL OF PHARMACY. — The prizes for the Second B Course were presented on Saturday, the 3rd inst., by the Secretary, Mr. W. Baxter, to the following successful competitors: — Senior Chemistry: Medal, Mr. Newbigin; Certificate, Mr. Lemmon. Junior Chemistry: Medal, Mr. Scammell; Certificate, Mr. Stevens. Botany: Medal, Mr. Betts; Certificate: Mr. Dutton. Materia Medica: Medal, Mr. Cook; Certificate, Mr. Stedman. Pharmacy and Practical Dispensing: Medal, Mr. Stevens; Certificate, Mr. Cook.

THE CARMICHAEL PRIZES.—A meeting was held at the Royal College of Surgeons in Ireland on Monday last, to receive the report of the adjudicators of the Carmichael Essays. Messrs. Mapother, M'Clintock, and Stokes were the examiners of the essays sent in for competition, which amounted to twelve; and on their report the first prize of £200 was awarded to Mr. Walter Rivington, of London; and the second of £100 to Mr. Thomas Laffan, of Cashel.

THE LANCET.

LONDON: SATURDAY, MAY 10, 1879.

THE way of medical legislation is not a smooth one, and the immediate prospect of any actual achievement in the shape of a good Medical Bill is even more unsatisfactory now than it was a week or two since. As a specimen of the treatment which the Government Medical Bill is receiving, even at the hands of the Government itself, we need only refer to what happened last week. After being down for discussion on previous occasions, the Medical Bill from the Lords was down for Thursday, the 1st inst. But on the notice paper it was down, not first nor second, but actually in the twelfth place. On this Government night there were no less than eleven other Bills which the Government considered of greater importance than its own Medical Bill. This seems to indicate either a want of interest in the Bill on the part of the Government, or, what is more probable, a conviction that the opposition to its measure is too strong to be overcome. As we have always maintained, this is not a political question, and even a strong Government cannot carry a Bill on such a subject with a high hand. It is a subject on which most members of the House of Commons would be guided by the judgment of their medical constituents; and any measure that is to pass must take a little more account of the opinion of the medical profession.

We quite agree with the promoters of the Bill if they are of opinion that the opposition to it would wreck the Bill as it wrecked the Bills of Lord RIPON and the Duke of RICHMOND last year. But, nevertheless, we can by no means agree with the Government in thinking that it is justified in the course which it appears to be taking with reference to medical legislation. The House of Commons has never had any opportunity of really examining the subject upon which it is called upon to pass a Bill, though it is one of huge importance to the people. It has been simply asked to receive in faith a Bill which is to recast, for perhaps generations, a system of medical examinations which is antiquated and out of date, but which the Government Bill practically proposes to perpetuate. The medical examination system affects the interest of corporations that are as old as the time of HENRY VIII. and older, and of universities that date their licensing powers from Popish bulls of the fifteenth century. These are no doubt weighty considerations, but they are not the only ones that should be entertained by a Government in the last quarter of the nineteenth century. The interests of the public and of the medical profession outweigh even those of ancient corporations; but they are not necessarily inconsistent with them. The respective importance and the mutual bearing of these interests require a clearer statement than has yet been given; and it is not unnatural that enlightened members of the House of Commons should wish to have such statements made to them by those who are able to make them in the name of corporations or universities, or in virtue of some personal or professional experience of the working of existing arrangements. This is the simple meaning of the various amendments with which the Government is confronted whenever it proposes to read its Bill a second time in the House of Commons. Dr. LYON PLAYFAIR, Dr. CAMERON, Dr. O'LEARY, and Mr. ERRINGTON all agree in this: they all ask for inquiry by a Select Committee. It is deeply to be regretted that the Government does not promptly yield to the request that all the Bills now before Parliament, including its own, shall be referred to a Select Committee. If the Government Bill is really the best and the justest Bill that can be devised, it will survive the examination of the Committee, and come forth with almost irresistible claims to consideration. The Government is a Conservative one. It can never hope to have a House more considerate of corporations and old and vested interests than the present, nor one more respectful to a Bill representing Conservative views. The very movers of amendments, the very persons that are asking for the Select Committee, betray a greater regard for existing interests than a wish for change, and may be relied on to say what can be said for the *status quo*. Dr. PLAYFAIR is alarmed—most undignifiedly and unnecessarily, in our judgment—for the Scotch Universities; Dr. O'LEARY does not deny that he represents the Irish College of Surgeons; Dr. CAMERON probably thinks that the existing arrangements need simplification, but that, as simplification may touch the interest of old bodies, they should at least be heard; Mr. ERRINGTON is the author of a Bill, indeed, which proposes to create another examining body, but, in mercy to the existing nineteen bodies, he would insist on one or more of their diplomas being necessary as licences for practice, in addition to that of the new body which he would institute. The professed object and the known views of those who ask for a Select Committee are a guarantee that existing interests will be only too well looked after on the Committee. For the Government, seeing it to be impossible to pass its own Bill, to refuse to grant a Committee so asked for, is to give a colour of plausibility to the assertion that they are, to put it negatively, deficient in magnanimity, and acting a sort of dog-in-the-manger part. We are unwilling to charge the Duke of RICHMOND and GORDON with such a feeling after the great consideration and courtesy he has already displayed, and we will still venture to hope that he and his colleague, Lord GEORGE HAMILTON, will, without further delay, utilise the remainder of the session by appointing a committee to inquire into the merits of the various Bills before the House—in other words, into the best means of providing a Medical Council and an Examining Board above suspicion of "interest" or inefficiency. Of one thing, however, we are sure—that the existing arrangements cannot long survive; and that, however those who are interested in maintaining them may rejoice at the delay of reform, reform will come, and is likely to be more effective and thorough the longer it is delayed.

THE Port Sanitary Committee of the Corporation of London has just issued a Report on the Sewage Pollution of the Thames, which we are disposed to think is the most important of the several reports which have appeared on the subject since the question was opened by Captain CALVER,

R.N., at the instance of the Conservators of the river. The report has been prepared by the medical officer of health for the port, Mr. HARRY LEACH, from data chiefly obtained, by a detailed and most painstaking examination of both banks of the river, within the limits of the port, by one of the inspectors of the Sanitary Authority, Mr. LEWIS. This inspection must have been a long and tedious work, and we gather that it had been entered upon in the ordinary course of the duties attaching to the Port Sanitary Authority, although it may be surmised that latterly it may have had more special attention given to it in consequence of the condition of things as to the state of pollution of the river, within its tidal limits, disclosed by the late inquiries of the Thames Conservators, and in relation to the loss of the *Princess Alice* steam-vessel. We had occasion, at the time of these inquiries, to point out that the foulness of the stream then brought to light called in a special manner for the intervention of the Port Sanitary Authority, and that a serious duty devolved upon the Authority in this matter. We would not imply that this subject had escaped the attention of the Port Sanitary Authority; indeed, it is obvious from the reports of their medical officer of health that this subject had engaged their serious attention before public notice was directed to it by the inquiries referred to, and that they were dealing with the subject as far as lay within their power.

It was an unpleasant awakening for the population of London when they found, in the course of the inquiries promoted by the Thames Conservancy and concerning the loss of the *Princess Alice*, that although the general condition of the Thames within the heart of the metropolis had manifestly improved since the main sewerage intercepting scheme had come into operation, yet that the actual pollution of the water still remained serious, and that there was a possible regurgitation of sewage, sweeping almost to the western limits of the metropolitan area, from the great outfalls at Barking and Crossness. Although the actual merits of the questions raised were almost hopelessly confused by the statements of the various parties concerned in the discussion, each following methods of inquiry irreconcileable with the methods pursued by the others, the broad and unpleasant fact remained that the Thames within and below London had a degree of foulness which had not been anticipated by the public at large, and which cast grave doubts upon the efficiency and judiciousness of the vast and costly plan of sewerage carried out by the Metropolitan Board of Works, with a view of promoting the purification of the stream. Now the report of the Port Sanitary Authority brings to light the important and somewhat startling fact that there has probably never been that amount of improvement in the state of the river within the limits of the metropolis that the public had a right to expect and had fondly believed, and this, as it would appear, according to the Port Sanitary Authority, from distinct default of duty on the part of the Metropolitan Board of Works. Setting aside the questions of an increased flow of sewage into the Thames, from the growing population above the Port Sanitary Authority's district, and of a regurgitation of sewage from the Barking and Crossness outfalls, as not concerning us here, we learn from the report before us that not less than 411 sewers still open into the Thames within the limits of the Metropolitan Board of Works' jurisdiction, and that of these 176—106 on the south side and 70 on the north side—certainly contribute, some it is to be presumed largely, to the foulness of the river! The total number of sewer outfalls within the district of the Port Sanitary Authority, which extends from Teddington Lock to the Nore, is 527 (including Barking and Crossness), of which 327 are unquestionably foul, and of this total more than half still exist within the metropolitan area. How the great numbers of sewers still pouring their foul contents into the Thames, within the metropolitan area, come not to have been intercepted in completing the great main-drainage scheme, it is for the Metropolitan Board of Works to explain. The fact is unutterably scandalous as touching the fashion of work of a great public body, and the Port Sanitary Authority deserves the thanks of the metropolis in bringing it to light.

IT is much to be regretted that a few hours cannot be found for the Parliamentary discussion of Mr. DILLWYN'S Bill to amend the Lunacy Acts. The recent agitation in connexion with this subject has disturbed public confidence, and exerted an injurious influence on the minds of patients, friends, and medical men engaged in lunacy practice. Even the Select Committee which sat two years ago, and effectually disposed of the specific charges against asylums, reported to the effect that there were certain changes it would be desirable to make. Had the Committee seen its way to declare simple satisfaction with the law as it stands, the public question would have been closed for at least some years to come. The fact that recommendations have been made, although the reforms propounded by the Committee were comparatively insignificant, has had the effect of leaving the question open, supplying capital to those who are disposed to carry on the agitation, and withholding that recognition of the honourable bearing of asylum proprietors and managers towards their patients which would probably orm the strongest incentive to further enterprise in aid of the insane. It has been shown beyond question, by our own inquiry concerning the condition and work of the asylums round London, and by the conspicuous failure of each particular case of alleged grievance submitted to the Select Committee, that a huge stride has been taken in the beneficial reform of the asylum system during the last thirty or forty years. We have already expressed a strong opinion that the improvement effected has been mainly due to the persistent and, on the whole, judicious endeavours of Lord SHAFTESBURY'S Commission; but it may not fairly be forgotten that the jurisdiction of the Commissioners in Lunacy has been suasive rather than dictatorial, and to the managers of asylums must be ascribed the credit of having perceived the tendency of enlightened public opinion, and, to a great extent, emancipated themselves and their patients from the blighting and ruinous influence of a conviction that insanity was a doom rather than a disease, and that, beyond the supply of bare necessaries, and the avoidance of actual cruelty in the "care" of the insane, little or nothing more could be required of them. It is to be deplored that the section of the profession engaged in lunacy practice has not yet arrived at the conclusion that insanity is curable; but short of the impetus which that discovery might impart to

progress in the *treatment* of mental disease—as distinguished from, if not contrasted with, the mere custody of lunatics,—it must be conceded that much has been accomplished in the amelioration of the condition of the insane, and an ungrudging acknowledgment of what has been bestowed is certainly the most promising and gracious way of suing for more.

The provisions of Mr. DILLWYN'S Bill have already been specified in general terms, and more particular consideration of the changes they contemplate may be deferred until the views of the promoters are before us. Meanwhile it seems necessary to appeal to the Government to afford an opportunity for the discussion this question deserves. The Secretary of State for Home Affairs has intimated his intention of moving in the matter of Lunacy Law reform, and has practically committed the Lord Chancellor to submit certain proposals to Parliament. What these may be we cannot even conjecture; but the hope, or apprehension, that something is impending exerts a disquieting, and, if it be prolonged, what must prove an enervating, influence on the proprietors and managers of private asylums. Strong in the knowledge of their own honest purposes, and confident of the final justification of their policy, these gentlemen are not, we believe, seriously anxious, but the position frets them, and, in short, they would fain know their fate. It cannot possibly be anything dreadful that awaits them; but the feeling that a change in their holding may be imminent is not conducive to a bold policy of improvement such as may fairly be expected when this vexed question is finally adjusted, let the decision be what it may. The agitation, although ill-judged and abortive, must in the end do good. The only disaster which could prevent this beneficial result is unfortunately that which seems to threaten the subject of Lunacy Law Reform—namely, such an indefinite postponement of the settlement and such child's-play with the question in the interim, as must convert the whole movement into an occasion for mingled merriment and contempt. Looking at the situation from a practical business point of view, nothing could well be more unsatisfactory. It is obviously vain to expect proprietors of licensed houses to do more in the way of enterprise than keeping their establishments in reputable repair and domestic efficiency while the contingent possibility of their being bought out is kept hanging over them. Here and there an enterprising and long-sighted capitalist may be willing to invest, on the chance of being compensated, but the majority of men—and we venture to think the best—will prefer to hold back as much as possible until the clouds of dust still blurring the prospect have been cleared away. Then, again, it is useless advising students to embark on a course of preparation for the specialty until something like stability is restored to this branch of practice. It would doubtless be most advantageous to the cause of professional enterprise to learn that the status of asylum medical officers was to be raised and their interests consolidated; but suspense is worse than hopelessness. In every respect there is embarrassment, and in many departments almost stagnation, in regard to this question, and the situation will grow daily more serious until the end is reached. Further delay is, therefore, to be very strongly deprecated, and a policy of procrastination can have no excuse. The question is one into which considerations of party policy and tactics cannot reasonably obtrude. It matters nothing whether the promoters of the Bill before the House of Commons support or oppose the Ministry, or whether the views they entertain on general or particular questions, other than the present, are such as any party in the Legislature can approve. The only pertinent consideration is that this question of Lunacy Law Reform, having been raised, ought to be solved, and the opportunity now offered should not be allowed to escape.

Annotations.

"Ne quid nimis."

SMALL-POX AND GLANDERS AT KENSINGTON.

THE recent outbreak of small-pox at Kensington very well illustrates two or three points of great importance. First, that the wealthiest districts of the metropolis may be compromised with groups of cases of infecting disease secretly treated; secondly, that the amount of mortality from such diseases is actually no guide to the risks run by unsuspecting people; and, thirdly, that the very greatest good may be done by a vigilant and energetic health officer. In the four weeks ending March 29th, though the Registrar-General did not return small-pox as the cause of one death in the parish, twenty-eight were ultimately discovered by the sanitary authorities. In the four following weeks twenty-seven cases of the disease were recorded by Dr. Dudfield in his report just issued. It is alleged that Mr. H. A. Middleditch certified the death of the first case—that of a little girl aged six—as caused by "*congestion of the lungs*." The death in question is said to have occurred in a house occupied by a *dairyman*. The disease spread to the two sisters of the deceased, to the father, and then to two lodgers—the family to which the lodgers belonged having, it is alleged, been kept in ignorance of the nature of the illness from which the child died. All this time the sale of milk and of bread appears to have been going on at the dairy, the business of the shop and the nursing of the small-pox cases being done by the same people. On March 18th, one of the girls appearing in the street with the eruption on her face, was seen, and the fact reported to the sanitary inspector. Thereafter the house was visited, and the sick—five in all—removed to the Fulham Hospital, whither they went willingly enough. The disclosure of so much sickness, and of so much concealment, of course has ruined the dairy business.

It will be seen how inadequate the number of deaths is as a guide to the risks of infection, or to the number of cases, in such a disease as small-pox. Out of all the above cases of small-pox only one case has been registered from the disease in the parish, most of the cases—thanks to vaccination—being mild ones. By the time death has occurred the the disease has been conveyed to others, who, each in turn, become a focus of the disease. The action of the medical officer in this case has been most exemplary in its promptness, and in the clear way in which he has brought the offences against sanitary laws under the notice of the local authorities, with whom will rest the responsibility of prosecuting.

In regard to two fatal cases of glanders occurring at 16, Colville-mews, the action of Dr. Dudfield has been even more thorough. He explained lucidly in his last report the risks of unventilated houses over mews, and the steps necessary to destroy the virulent infection to which the public itself is exposed in cabs, &c. He procured the removal of the second case to St. Mary's Hospital. He induced the coroner to hold an inquest on it, and the Metro-

politan Board of Works, as the local authority, to institute proceedings against the proprietor of the glandered horses for the offence of not giving notice to the police of the disease. For this the full penalty of £20 and costs in each of the two cases was enforced. The Registrar-General was consulted by the clerk to the vestry as to the action of Mr. H. A. Middleditch in not naming small-pox in his certificate. Dr. Dudfield publishes the following letter in his report for April from the Registrar-General to Mr. Middleditch. We should be glad to hear Mr. Middleditch's own account of the matter.

General Register Office, Somerset House,
April 1st, 1879.

SIR,—I am in receipt of your letter in which you state that you certified that Alice Jennings died of "congestion of the lungs," because to the best of your belief such disease was the proximate and real cause of her death.

I am informed that the child had been suffering from small-pox twelve days, and had been under your care about eight days before death; that five persons have just been removed to the Small-pox Hospital; and that between February 24th and March 20th the business of a dairy and the sale of bread, &c., have been carried on in the house by the wife of the proprietor, while he and his children and his lodgers were lying ill of small-pox, the woman herself nursing them.

In the certificate book, of which I enclose you a copy, you will observe that the primary cause of death as well as the secondary cause is required, and under the first you should have returned "small-pox." I do not understand you to deny that the child had small-pox, which fact you suppressed, and satisfied yourself by returning "congestion of the lungs," which is a common complication of small-pox.

The consequence of your suppressing any mention of the small-pox was that the whole neighbourhood was exposed for several days to infection from small-pox.

You request me to give you the name of the person by whom I was informed that the child did not die from the disease stated in your certificate, in order that you may take legal proceedings to vindicate your professional reputation. You will observe that you are accused of suppressing the important fact that the child had small-pox, and not, as you put it, that your certificate is wrong, inasmuch as the congestion of the lungs was a disease supervening in the case of small-pox.

You are at liberty to consider me responsible for the opinion I now express, that your certificate was an imperfect description of the cause of death.

I have the honour to be, Sir, your faithful servant,
GEORGE GRAHAM, Registrar-General.

THE "MARKET VALUE" OF MEDICAL MEN.

THERE is nothing like taking a sound commercial view of financial policy, and no sensible person can seriously object to a member of the Portsmouth Town Council expressing an opinion that "medical men should be got for their market value," albeit the sentiment might have been couched in more graceful and generous terms; but this is a matter of taste, and taste has, probably, no market value at all in a Town Council. The occasion of this prettily expressed maxim of prudence was a deliberation with the view to advertising for a gentleman to fill the office of medical superintendent at a new asylum. The usual "haggle" about salary was in progress, and sagacious administrators were calculating whether £450, rising £10 for five years, was not too high a bid for first-rate talent, considering that the chosen man was to be accommodated with an "unfurnished house, with fuel, lighting, and garden produce." It seems that at Birmingham there are 600 inmates, and a salary of £425, while here they are only proposing to take 400, and actually offering £450. No wonder some of the town councillors were scandalised, and that one of them should have observed, "Besides, medical men could be got for the most nominal salaries." Alas! it is too true. Members of our profession *will* take public appointments with stipends scarcely sufficient to cover their expenses, and while they do so it is no wonder business functionaries of frugal mind talk about the "market value" of medical men, and speculate "whatever sum they might vote, they would get the same man." This is probably true, not because medical men approve the market value set on their services, but because it often suits the purpose of a local practitioner to take an appointment, even without pay, rather than sacrifice the professional opportunities it offers. In this case, of course, no such motive can prevail, because the medical supremacy of a lunatic asylum is an appointment which can only be safely filled by a man who has had experience in the treatment of the insane. If the Town Council of Portsmouth were to select an inexperienced man they would find to their cost that his "market value" would not even be "nominal." A policy of paltry economy not unfrequently overreaches itself, and proves in the end expensive.

THE PATHOLOGICAL SOCIETY.

THE meeting of the Pathological Society on Tuesday last was the most interesting that has been held this session. The evening was occupied with two communications—the one by M. Parrot, the well-known physician of the Hospice des Enfans-Assistés at Paris; the other by Mr. Watson Cheyne. M. Parrot, who apologised for speaking in French, dealt with the subject of Osseous Lesions in Hereditary Syphilis, a subject peculiarly his own, for, so far as we know, to him belongs the credit of first directing attention to changes which he deems pathognomonic of the disease. He exhibited a magnificent collection of skulls and long bones, showing these changes, of which he describes two varieties, the atrophic and the osteophytic. In the long bones the atrophic change occurs chiefly in the form of an increase in the chondro-calcareous layer at the extremity of the diaphysis. The altered tissue being very friable, the affected bones have a tendency to break at these points from muscular effort, and M. Parrot stated his belief that many so-called syphilitic "infantile paralyses" were really due to those fractures, for there was no muscular wasting nor change in electrical reaction, nor after death any change in the nervous centres. He pointed out how important this was to recognise practically, for if such cases of "pseudo-paralysis" were treated by electricity, the muscular contraction induced only served to aggravate the mischief. Atrophic changes of a gelatiniform kind attacked the flat bones of the skull, especially in children under five months of age, and he showed specimens where such changes had gone on to perforation in some points. The "osteophytic" variety of lesion was even more remarkable. It was to be noticed especially in the cranial bones, commencing in the vault of the skull, around the fontanelles, and leading to bossy elevations on the frontal and parietal bones, which are most characteristic, and which sometimes attain a large size. The change was of two kinds: one hard, like compact bone—osteoid; the other like cancellous bone, or spongioid (as in rickets), the latter being rarely met with in very young subjects. So characteristic was the deformity produced, that without any other signs, M. Parrot said, examination of the skull alone would determine the question in favour of syphilitic disease. Such deformation of the cranium was as pathognomonic a sign as the early fracture of long bones just referred to. Having described the mode of formation of the "osteophyte," and its microscopical differences from true bone, M. Parrot proceeded to show that a large number of cases of cranio-tabes were really due to the presence of the spongioid form of the disease in the skull; and he demonstrated clearly how those points of the skull which were subjected to pressure were the seats of this thinning. Thus the right side of the head, in the posterior parietal region, corresponding to the part

on which the head generally rested (and where consequently the brain would exercise chief pressure), was most frequently the seat of cranio-tabes, whilst the opposite points of the cranium were the seat of osteophytes. Another point was the occurrence of premature synostosis in these skulls, so that the cranial capacity was early limited, and the children often in consequence very defective in intellect. But the most remarkable development of the subject, at once showing M. Parrot's strong belief in the characteristic nature of the changes, and also settling a long-debated question in the history of medicine, was the demonstration that skulls showing these deformities had been found among the remains of the aborigines of South America; and he passed round a drawing of such a skull from the museum of the Anthropological Society of Paris. The skull was from an adult native of Lima, in Peru, and M. Parrot said it demonstrated with anatomical precision that syphilis existed in America before the Spanish conquest. But the history of syphilis, on the same evidence, dated even further back than this; three fragments of infant skulls from a dolmen in Central France showed so clearly the presence of the changes that he could not hesitate to affirm that syphilis existed even in prehistoric times—a statement perfectly in accord with other facts lately adduced by M. Broca from the examination of ancient skulls—that epilepsy and convulsions also prevailed among primeval man. A brief reference to the occurrence of osteophytic changes in the long bones, and to the changes in the teeth, first described by the President, Mr. Hutchinson, brought M. Parrot's remarks to a close. A vote of thanks was passed to M. Parrot by acclamation; after which some remarks were made by the President, Drs. Lees and Barlow (who showed children exhibiting the cranial changes in a marked degree), and Mr. Macnamara.

The subject of the occurrence of organisms under antiseptic dressings was treated by Mr. Watson Cheyne in a paper notable for the strict logical method and scientific accuracy with which the observations it recorded had been carried out. Mr. Lister followed, pointing out the bearings of the subject; upon which we may defer further comment until the report of the meeting is before our readers.

SURREY COUNTY ASYLUM, BROOKWOOD.

DR. BRUSHFIELD'S annual report is always welcomed as a record of good work, and a fair and practical estimate of the progress made in lunacy practice during the period his retrospect covers. The recent overgrowth of this asylum has necessarily detracted from its value as a "curative" establishment, and the fact that the proportional average of recoveries is still good reflects creditably on the management. During the year 1878 the percentage of cures on admissions has been 45·5, and on the total number under treatment 10·0. One-half of the cases discharged as "recovered" were so discharged within six months of admission. The death-rate has been 10·12 per cent. on the average number resident. The average age at death was, during the year 1878, 49·61, which is above the mean age at death in asylums generally. This fact, probably, indicates the presence of a large proportional number of aged inmates, and a corresponding or consequential preponderance of cases which are incurable. Dr. Brushfield refers in his report to the practical question arising on this basis as follows:—"I may here allude to a point which has been mentioned by one of the most eminent living psychologists—viz., that the proportion of recoveries is no greater now than it was thirty or forty years ago. Now, although this statement may be a probably correct fact, the data for comparing the results of the two periods are altogether different. Formerly the most acute, and therefore the most curable cases, those of active madness, formed the bulk of those removed into asylums; whereas, at the present date, a large number of the demented and weakminded, idiots, and cases of chronic insanity, often quiet and harmless, have, under the operation of various Acts of modern legislation, especially under the very last of these Acts authorising the capitation grant, been crowded into asylums, and who in former years would certainly not have been sent for admission. Under these circumstances, it is rather a matter of surprise that the proportion of recoveries is as satisfactory as it is." This is undoubtedly a just criticism, and it is one that deserves to be placed on record. Nevertheless, it is undeniable that the results of treatment are not, *cæteris paribus*, greater now than they were before the negative system of "non-restraint" was introduced, and left as a sterile piece of humanity to gladden the hearts of philanthropists without satisfying the aspirations of those who look upon insanity as a disease and strive to cure it. It was well to cut down the evil tree, but a wise husbandry would have endeavoured to plant something better in its stead. When this better system is planted, and begins to bear fruit, it will probably be found to flourish best in asylums of less magnitude than one numbering over a thousand inmates.

THE COLLEGE OF SURGEONS ELECTION.

THE annual election into the Council will take place on Thursday, July 3rd. Four vacancies will be declared, caused by the death of Mr. John Hilton, and the retirement, in the prescribed order, of Messrs. F. Le Gros Clark, T. Spencer Wells, and George Critchett. It is understood that Mr. Clark, who filled the office of president of the College in 1874, does not seek re-election; he will retain his seat as a member of the Court of Examiners. The other gentlemen will offer themselves for re-election. For the two vacancies mentioned, it is stated that Professor Wood, of King's College, and Mr. Henry Power, of St. Bartholomew's Hospital, both members of the Board of Examiners in Anatomy and Physiology, will be brought forward; the names of Professor Lister, of King's College Hospital, Mr. Bryant, of Guy's Hospital, and Mr. Callender, of St. Bartholomew's Hospital, have also been mentioned; and it is stated that a provincial Fellow will be proposed. On referring to the Calendar of the College, it will be seen that a fourth of the Council hail from the country—namely, Mr. Lund, of Manchester; Mr. Wheelhouse, of Leeds; Mr. Baker, of Birmingham; Dr. Humphry, of Cambridge; Mr. Clark, of St. Leonard's-on-Sea; and Mr. Hancock, of Andover. The last two gentlemen, perhaps, may not be considered strictly "provincials." As some objection has been raised to members of the Board of Examiners retaining their seats as such, it has been stated, perhaps without authority, that if elected, as doubtless they will be, Messrs. Wood and Power will resign their chairs.

THE SOCIETY FOR THE RELIEF OF WIDOWS AND ORPHANS.

WE are disposed to hope that a new era of usefulness is in store for this Society. The annual meeting on the 30th ult. was well attended, under the presidency of Sir George Burrows, and considerable anxiety was displayed by the members to widen the sphere within which the benefits of the Society are now enjoyed. Dr. Sieveking went so far as to say that he saw no reason why the Society should not admit to its membership medical men in any part of the kingdom. We are not prepared to say that the charter of the Society would allow of this. But the proposal is to be considered by the directors, and the feeling was general that some wider limit than the London postal district should be adopted. It was agreed at the meeting that henceforth the annual meeting of the Society shall be held in May, and that everything shall be done to

give it publicity and interest. Dr. Andrew Clark was elected an honorary member. Oddly enough, Dr. Clark has only lately become aware of the existence of the Society, but he had no sooner done so than he forwarded a cheque for £100 to the treasurer. The accounts showed that in the last year the total receipts available for payments were £3201 11*s.* 1*d.*, the total grants and expenses amounting to £3084 18*s.* 8*d.*, leaving a balance of £116 12*s.* 4½*d.* The expenses amounted to £188 18*s.* 8½*d.* We cannot too strongly advise all members of the profession to join this Society, whether with provident objects or with charitable ones. Dr. W. Tiffin Iliff, W. H. Sheehy, Esq., Dr. G. B. Brodie, Dr. Charles J. Hare, Luther Holden, Esq., and Christopher Heath, Esq., were elected directors in place of the six senior directors who retire.

POPULAR AGITATION AGAINST THE "SWEATING" SYSTEM.

A CAUSE which we have often advocated in these columns has recently received noteworthy support from a public meeting held at Dublin. This assembly was convoked for the purpose of adopting measures which might check the evils resulting from the home-work and "sweating" system practised in the tailoring trade. The Rev. Samuel Haughton occupied the chair, and was the principal speaker, and received efficient support from Dr. W. H. O'Leary, M.P., Alderman Harris, Dr. M'Intee, &c. He justly complained that under the Factory Act there was no provision whatever made for the inspection of those private lodgings which were *de facto* turned into workshops. The fearful condition of these dwellings, in which wearing apparel is made, has often been described by our commissioners. At the same time we are pleased to hear our views supported by Dr. O'Leary, M.P., who related to the meeting how he had visited many tenements, and found that in some cases one small room served as bedroom, eating-room, and workroom for six people of both sexes. A resolution was passed calling upon the local authorities to petition Parliament to appoint a commission "to inquire into the propagation of infectious diseases through the sweating system of tailoring, otherwise the manufacture of clothing, for all classes of the community, in tenements impregnated with the germs of small-pox, typhus and scarlet fevers." Another resolution was passed to the effect that a committee should be at once appointed by the chairman to investigate the present state of affairs relating to the sweating system as carried on in Dublin, and prepare evidence on which the demand for a Royal Commission may be based. These suggestions met with unanimous approval, and we cannot but congratulate ourselves on the fact that after so many years the public are beginning to move in this matter. The present small-pox epidemic which is afflicting Dublin will not have been endured in vain if the danger gives to this movement the strength to reach a successful issue.

CONFERENCE OF MEDICAL OFFICERS OF HEALTH.

A JOINT meeting of the North-Western, Northern Counties, and Yorkshire Associations of Medical Officers of Health was held recently at Leeds. The meeting was well attended, and Mr. J. W. North, of York, the President of the Yorkshire Association, was elected to the chair. The chief proceedings of the meeting consisted—first, in listening to and discussing two papers, one read by Dr. Goldie, the medical officer of health for Leeds, retrospective of the hygiene of that borough; the other by Mr. F. Vacher, the medical officer of health for Birkenhead, on diseased animals and their fitness for food;—and next, the discussion of a proposition for the amalgamation of the three Associations, which, it may be said at once, proved futile. An exhibition of sanitary applicances had been arranged by Dr. Goldie, in which local designs and manufactures were well represented.

Our local contemporary, the *Leeds Mercury*, which, from the thoughtful manner in which it is accustomed to deal with matters of public health, commands special attention when it treats of them, is not disposed to regard the proceedings of the Conference with the same degree of satisfaction with which they appear to be regarded by the members themselves. It demurs to the shortcomings of the local authority of the place of meeting being made the subject of discussion by strangers, as more likely to rouse prejudice on the part of the authority than promote progress; and it takes exception to that latitude of selection which seemed to be implied in Mr. Vacher's endeavour to state with some approach to precision the diseases of animals which do not necessarily render them unfit for food. These observations should have weight with the promoters of future conferences, coming as they do from an organ of public opinion which has at all times been one of the most strenuous and faithful supporters of sanitary progress. These conferences cannot well be other than public meetings, and it ought not to be difficult to select subjects which, while not giving rise to local ill-feeling and misapprehension, would tend to promote good work, while helping to a common understanding among the members of the conference. It should certainly be an aim of these conferences to represent the medical officers of health in such guise as would draw the public to rather than repel it from them.

THE CONTAGIOUS DISEASES ACTS.

ON Monday last Colonel Loyd Lindsay, on behalf of the Government, replying to Sir Harcourt Johnstone and Mr. Tremayne, said that the Select Committee on these Acts would be nominated at once—ten members as usual, five to be selected by the Committee of Selection; so that the *quæstio vexata* is about to be reopened, instead of being referred to the second reading of the Repeal Bill, which is still fixed for the 30th July. When the Committee is appointed, what will they do? If, as we sincerely trust is the case, they are sufficiently strong, no better thing could possibly happen than, as Mr. Tremayne suggests, to extend the inquiry so that the provisions of the Act may be extended to the principal seaports now unprotected—i.e., to the chief mercantile marine ports of the kingdom. The amount of good that would be effected by such an extension can be realised best by those who are familiar with Ratcliffe-highway, Whitechapel, the purlieus of Limehouse, and, again, the low-lying quarters of Liverpool, Glasgow, and Bristol. Let those who doubt the accuracy of these statements, or, rather, premisses, go down to Greenwich, and glance over the entry-books of the *Dreadnought* Hospital for, say, the last twenty years, and they will there see a catalogue of filthy and preventable diseases appalling to read and still more humiliating to contemplate, because, as we believe, the lives, health, and stamina of most of those sailors whose sickness and deaths are there recorded might have been saved had the Contagious Diseases Act been in operation in the port of London and elsewhere. It is, however, manifest that the difficulties of its application to this vast metropolis are very great indeed. Who can tell where, on land, the *port* of London begins and ends? On the water it is defined by several Acts of Parliament, chiefly for Customs purposes, and these limits have been copied in the Public Health Acts of 1872 and 1875, in defining the limits of the port for sanitary purposes. But, in the administration of the Contagious Diseases Acts, these sections afford no aid at all. And if the geographical scope of the Act is to end, say, at Charing-cross

and Westminster-bridge, prostitutes and their supporters are simply sent over the border to ply their trade, to the advantage of cab and omnibus proprietors, and to the disadvantage, in a moral sense, of West-end residents. But putting London aside, for the nonce, as a nut too hard to crack, it seems that, as to all outports, no practical difficulty exists. If the metropolis cannot be included, leave it alone for the present, for if the outports of Liverpool, Bristol, Hull, Sunderland, Shields, Newcastle, and two or three others be included, we should be very thankful for what need not be classed as by any means a batch of "small mercies." We approach this matter, of course, with fear and trembling, knowing well the unreasonable, unreasoning, but extraordinarily powerful opposition that exists to the Acts, as they now stand. But as the bolt, so to speak, has fallen in the shape of a Select Committee, with Mr. Tremayne's very practical if somewhat premature suggestion, we say emphatically, include all the chief mercantile marine outports, leaving London alone for the present; and, if witnesses are wanted, summon some of the medical officers of the Liverpool hospitals, and also of the Seamen's Hospital at Greenwich, who could give most valuable information on this very important subject.

EDINBURGH ROYAL MATERNITY AND SIMPSON MEMORIAL HOSPITAL.

THE new premises of this institution have just been opened in Edinburgh under the presidency, in the unavoidable absence of the Lord Provost, of Dr. Alexander Peddie, the President of the College of Physicians. In its present form, which is declared to be very satisfactory in a sanitary respect, the hospital takes the shape of a memorial of the late Sir James Y. Simpson. The famous accoucheur and gynecologist could have no more fitting monument than a hospital for the treatment of those cases, to the elucidation of which he brought so much genius. True, there is nothing in the fame of Simpson that will obviate the sanitary objections to a maternity hospital. But it will be a part of the responsible duty of those who manage the hospital to see vigilantly to it that good art is not spoiled by bad air. The sum received for the Building Trust from the Sir James Y. Simpson's Memorial Committee is £2100, and a "Woman's Offering to the Maternity Hospital in memory of Sir James Y. Simpson" is £400. We wish the hospital every success.

A CRANIAL SEQUESTRUM.

A VERY curious specimen was recently shown to the Académie de Médecine by M. Broca. It was an enormous sequestrum, consisting of the two parietal bones with portions of the frontal and occipital bones. The remarkable circumstance is that the patient from whom it came is still alive, and it is now two and a half years since it came away. He is a boy aged eleven, who has always presented a peculiar and even pathological profoundness of sleep, so that in the night he could not be aroused by either noises or blows. One evening he was left alone in the house by his parents, and was found, on their return, lying on the floor with his head in the fire and fast asleep. His cap had taken fire, and burned slowly, together with his hair. How deeply the fire had penetrated could not be ascertained, but his scalp presented an enormous burn. He was put to bed, still asleep. Next morning the lad woke up, as usual, and went on to the mountains to look after the sheep, as if nothing had happened, and from that time, three years ago, he has continued to do so every day. Six weeks after the burn a large slough separated, and exposed the cranial vault, and the boy expressed much satisfaction at the result, since it enabled him to carry a bundle of sticks on his head without being hurt by the thorns. Six months later an enormous piece of bone came off, of which the specimen exhibited by M. Broca was only a portion. There resulted a huge wound, which was in full granulation when the priest of the district (to whom the profession is indebted for the specimen) first saw the boy, a year after the accident. The only dressing employed was oiled linen placed under his cap. In one of the rare visits paid to the boy by the priest, the latter felt pulsations at two points, synchronous with those of the pulse; at his next visit, two years after the accident, these were no longer perceptible. Hence, probably, the brain had been exposed and gradually covered with new bone. It is now three years since the accident, and the wound is still imperfectly cicatrised, although the continuance of the process leads to the expectation that it will ultimately be complete.

CORONERS AND CAUSES OF DEATH.

THE Births and Deaths Registration Act of 1874 provides, in Section 16, that coroners shall furnish to registrars of births and deaths a certificate containing, among other particulars required to be registered respecting a death which has been the subject of an inquest, the cause of death. The cause of death in inquest cases, as certified by the coroner, is entered in the death-register. Coroners, unfortunately, do not always appear to realise the desirability that the finding of the jury should convey some definite information as to the cause of death; this is much to the detriment of the death-register as a source of mortality statistics. Such verdicts as "natural causes," "accidently killed," and other equally causeless verdicts, should now be much less common than they still are. Having occasion recently to examine the death-register of one of the home counties, we came upon three entries of death that occurred in the county during the last quarter of 1878, in which the cause of death was returned by one of the deputy coroners for the county as "temporary insanity." Such a verdict certainly conveys indirectly the idea that these were three cases of suicide, but really gives no definite information as to the cause of death. In the proposed Coroners Bill a clause should be inserted which would prevent the continuance of such unsatisfactory coroner's work.

THE OUTBREAK OF TYPHOID AT CATERHAM.

THE official report of the outbreak of typhoid at Caterham, by Dr. Thorne Thorne, of the Medical Department of the Local Government Board, has now been issued. It adds nothing to the facts which we published from time to time during the course of the disease, and which included the results of Dr. Thorne Thorne's investigations as communicated to the sanitary authorities in whose districts the outbreak occurred. We do not propose, therefore, to review the facts again, but we are wishful to direct attention to them as given in the official report. The story, as presented by Dr. Thorne Thorne, furnishes another illustration of the admirable method followed by the medical inspectors of the Local Government Board in their investigations of localised manifestations of disease. Nothing could well be completer than the inquiry as conducted by Dr. Thorne, under considerable difficulties, or more conclusive in the results. The outbreak is traced step by step to the pollution of the water-supply of the affected district, at a particular time, by the alvine discharges of a particular person suffering from typhoid fever. The masterly analysis of the facts by Dr. Thorne gives to his results a certainty which for all practical purposes amounts to a demonstration.

Nor does Dr. Thorne Thorne stand alone in the inquiry. Mr. E. L. Jacob, the medical officer of health for the combined sanitary districts of Surrey, contributed, from independent observations of a part of the outbreak which fell

under his notice, important evidence confirmatory of Dr. Thorne's conclusion. And it should be noted that it was due to the sagacity of Dr. Hilliard, of Caterham, that the clue to the outbreak was seized from the beginning.

STATISTICS OF ZYMOTIC DISEASES.

WE perceive that Mr. P. C. Chadwick, of Axbridge, has been taken to task by the local sanitary board for refusing to report to their health officer cases of zymotic disease occurring among his private patients. We may remark, parenthetically, that the authority has no power to enforce such an order or request, and remind those of our own profession interested in this question, as well as the public, that we have always urged the great importance of establishing a registration of zymotic disease. But the informant should be the householder, not the medical attendant. No respectable practitioner cares to be put into the position of a spy, even by Act of Parliament, but we opine that the householder is as much bound to give the authority the information indicated, as he is to pay the Queen's taxes, and otherwise to fulfil his responsibilities as a member of a civilised community. But the same principle that, in our opinion, prevents a general practitioner from fulfilling properly the duties of medical officer of health would prevent him also from being the medium between his own patients and the sanitary authority in such cases as those above-quoted. And so, whilst agreeing entirely with the local board at Axbridge as to the importance of acquiring such knowledge, we believe that Mr. Chadwick is quite justified in declining to give it, having, as it appears, fully stated his reasons for so doing.

THE MISCHIEVOUS MONTH OF MAY.

IF a calendar of diseases should hereafter be compiled, it will be needful to lay especial stress on the month of May. This is in truth the period for sowing the seeds of the worst varieties of disease. Particularly after a long and dispiriting winter are the blandishments of this treacherous month full of perils for the weak and not free from dangers to the strong. The sun, which has scarcely deigned to shine during the long, dull, and cold season, lights up the scene and warms the atmosphere, so that overcoats and wraps are thrown aside. Presently clouds obscure the furtive source of heat and light, and the cold wind chills the surface, the more susceptible because unused to exposure. Congestions, inflammations, and general disturbance follow, with the effect of awakening latent disease to deadly activity or sowing the seed of troubles to come. The prudent will be warned against these betrayals, and place no confidence in the lures of an unstable climate, never so full of lurking mischief as when it smiles, or more cruel than when it seems to relent.

CHOLERA AT HURDWAR.

A TELEGRAM from India reports a serious outbreak of cholera among the pilgrims assembled this year at the great religious festival at Hurdwar, and the spread of the disease northwards in the track of the returning devotees. Delhi, Umritsur, Rawul Pindee, and other places have, it is stated, become infected by the pilgrims, and the malady was spreading further and further. A large body of pilgrims from Kumaon had been decimated by the disease. The great fatality among this body is reported to have arisen from their having been compelled to leave the high-roads and to travel by by-paths, where food, water, and shelter were difficult to be secured. This report, however, needs confirmation.

It would seem that the festival of this year was of peculiar sanctity, and that in consequence an exceptional number of pilgrims, estimated at from three-quarters of a million to a million, assembled together. The preceding festival of the same kind occurred in 1867, when cholera also broke out with great severity, and was scattered far and wide by the returning pilgrims. The outbreak of cholera at the festival in 1867 had a special interest for Europe. Dr. John Murray (now Surgeon-general, and President of the Epidemiological Society), then in Northern India, witnessed the spread of disease northwards in the track of the pilgrims that year, and came to the conclusion that he was witnessing the beginning of another great extension of cholera by way of Afghanistan and Persia to Europe. The last epidemic of cholera in Europe began in South Russia in 1869, and there is reason for believing that Dr. Murray was right in his forecast, although the extension from Persia had been obscured by previously existing cholera in Russia—the relics of the epidemic of 1865–1868. The future of this extension of cholera in the track of the Hurdwar pilgrims this year will be watched with considerable interest.

SANITARY RATING.

MR. A. BROWNE'S motion in the House of Commons, calling attention to the incidence of rating for certain sanitary purposes under the Public Health Acts of 1875 and 1878, and his motion for a committee on the subject, touched a matter which lies at the core of public sanitary work. He argued that the system of special drainage districts had largely failed to meet the difficulties which rural districts experienced in respect to works on water-supply and sewerage owing to the fact that the incidence of rating could not, in many cases, be limited to the persons benefited by the works. The President of the Local Government Board, while admitting that Mr. Browne had shown a case for further legislation on the subject, observed that he had underrated the relief effected by the construction of special drainage districts and by the provisions of the Act relating to water-supply of the previous session. But he held that the question was not so pressing as to justify him in dealing with it now, and apart from a Bill of wider scope introduced by Mr. Browne last session. He suggested that the subject should be dropped for the present session, and reintroduced on a smaller scale next year. He added that the proposal for a committee at that time traversed objects he had in view for advancing public-health legislation, and that the particular subject had not been lost sight of either by himself or his department. Mr. Browne's motion was negatived.

UNIVERSITY COLLEGE HOSPITAL.

IN aid of the funds of the North London or University College Hospital, in Gower-street, a special appeal was made this week on the occasion of the annual dinner at Willis's Rooms. The chair was taken by Mr. Alderman Fowler, and among the company, numbering about 120, were Sir Julian Goldsmid, M.P., Mr. C. J. Heywood, Mr. J. Eric Erichsen, F.R.S., Dr. Wilson Fox, Mr. David Mocatta, Professor Marshall, the Rev. Canon Spence, Dr. Beddoe, Dr. G. Vivian Poore, Professor Corfield, Mr. Marcus Beck, Professor Thaner, Dr. Roberts, and Mr. Edward Enfield, treasurer of the hospital. A marble bust, by Wyon, of the late Sir Francis Goldsmid, a great benefactor of this institution, was mounted on a pedestal, facing the chairman. The hospital, which is unendowed, has to depend upon public subscription for its support, and at the present time is in great need of funds. The operations of the charity are by no means confined to its own immediate neighbourhood, for patients are constantly sent from distant parts of the country to have the benefit of the skilful treatment and careful nursing afforded gratuitously to the sick poor. The building contains, in addition to wards for adults, two

wards with fourteen beds specially for the treatment of children under twelve years of age—one for boys, the other for girls,—which were opened in the spring of 1869. It is hoped shortly to increase the number of beds from 160 to 200, which will greatly augment the relief afforded annually, but will also increase the annual expenditure by at least £2500.

MR. ERRINGTON'S QUESTION ON MEDICAL REFORM.

MR. ERRINGTON has given notice that he will put the following question to the Vice-President of the Council on Monday next :—

"Whether, considering the complicated circumstances in which the important question of Medical Reform is now placed, and in order to avoid further unnecessary delay, he will now agree to its reference as soon as possible to a Select Committee, so that some progress may be made towards dealing with it."

The inquiry is most opportune, and, indeed, urgent. The questions involved in medical reform are very complicated and very important; and it will not be creditable to the Government to refuse the demand for a committee, coming as it does from all quarters. If the course recommended is not adopted, the Government will be solely responsible for the block in legislation upon which we have elsewhere, and before hearing of Mr. Errington's question, commented.

INQUESTS IN SHEFFIELD.

DURING the first quarter of this year the proportion of inquests held in twenty of the largest English towns averaged 5·9 per cent. of the deaths registered, and ranged from 2·2 and 2·8 per cent. in Oldham and Sheffield, to 7·6 per cent. in Leicester. Such marked variations in the proportions of inquest cases afford the strongest plea for some provision in the proposed Coroners Bill for securing a nearer approach to uniformity in the exercise of the discretion of coroners as to the necessity for holding inquests. With reference to the low proportion of inquests held in Sheffield, we may note that a week or two since a child was alleged to have been "smothered in bed" within that borough. The local registrar, in pursuance of official instructions (which should be strengthened by a clause in the proposed Bill), reported this case to the coroner, who subsequently notified to the registrar that it was unnecessary to hold an inquest. If this death had occurred in London, Manchester, or Birmingham, there is little doubt but that it would have been the subject of an inquest.

QUEEN CHARLOTTE'S LYING-IN HOSPITAL.

UNDER present circumstances the authorities of Queen Charlotte's Lying-in Hospital are incurring grave responsibility by continuing to advertise that "in-patients are received from all parts of the kingdom," their usual advertisement having appeared in *The Times* of Tuesday last. If this advertisement was inserted inadvertently, it is due to the reputation of the hospital authorities, and desirable on public health considerations, that equal publicity should be given to the following facts, reported by the Registrar-General in his last weekly return. During the five weeks ending last Saturday the deaths of no less than 10 mothers and of 18 infants have been recorded in this institution. When it is further stated that most of the mothers died from septicæmia, and a large proportion of the infants from erysipelas, we may be excused if we disbelieve the possibility that under such circumstances any new patients would be admitted to the hospital, the advertisement in last Tuesday's *Times* notwithstanding. We are told, however, by the Registrar-General that 59 births have been registered in this hospital since the 1st of April last, of which at least 18 have occurred since the 15th of April, and therefore since the outbreak of this remarkable epidemic. These facts require explanation, and afford further grave evidence of the serious responsibility attaching to the maintenance of this institution as a hospital for the reception of in-patients. Even during the last year, when the mortality in this hospital was below the average, there were 7 deaths of mothers to 565 deliveries of living children, which is about six times the average mortality among women delivered under the auspices of well-conducted out-door maternity charities.

THE ARTISANS' DWELLINGS ACT (1868) EXTENSION BILL.

THE Council of the Society of Medical Officers of Health have just forwarded, with the signature of the President, Dr. Thomas Stevenson, attached, a petition to the House of Commons praying that the Bill might become law, subject to the following amendments :—

"In Clause 3, line 17, the words 'Sanitary Inspector, or Inspector of Nuisances,' should be struck out.

"In Clause 8, line 33, the words 'Officer of Health' should be struck out, and instead thereof the words 'Local Authority' be inserted.

"In the first Schedule, Table A, England and Wales, description of Local Authority, line 13, the words 'The Metropolitan Board of Works' should be struck out, and instead thereof the words 'The Vestries, and District Boards of Works, under the Act 18 and 19 Vict., cap. 120, within their respective parishes and districts,' should be inserted, as in the Schedule to the Act of 1868."

These amendments are, as we have been informed, the outcome of much diligent attention that the Council have given to the measure, and we sincerely trust that the alterations suggested will meet with the approval of the House. For, in a matter of this kind, it is, according to our opinion, far better that such matters should be calmly discussed in a small coterie of men, all of whom are thoroughly familiar with the subject, than by a large number of committeemen to whom the very varied aspects of the matter are most probably presented for the first time. This must be the case with, at all events, the majority of the members of most Parliamentary committees.

THE LOCAL GOVERNMENT BOARD, IRELAND.

SIR ALFRED POWER, K.C.B., has resigned the office of Vice-President of the Local Government Board, Ireland, and Mr. Robinson, Assistant Under-Secretary and Clerk to the Privy Council, Ireland, has been appointed to succeed him. The Chancellor of the Exchequer, in answer to a question put in the House of Commons on the 5th instant, by Mr. Henry, stated that this appointment would not interfere with the proceedings of the Government in endeavouring to deal with the important question of so far uniting the Local Government Board (Ireland) and the Board of Works as to place at their head a member of the Government, to represent the departments in Parliament.

EXCURSIONING ON THE NILE.

A COSMOPOLITAN contemporary does pulmonary cripples and other varieties of invalids good service by telling them certain experiences of an excursion up the Nile by steam. A great deal has been written about the climate of Egypt as a place of resort for chronic pulmonary patients. But, as the author of a paper on South Africa remarked some months ago, in effect, climate is not everything, and far too little is known by physicians in this country as to those inner matters that go to make a prescription of this kind powerful for good, or eminently injurious as a remedy. The sum and substance of the account above referred to is a long series of dirt, dust, and discomforts, varied by donkey-drivers and their denunciations

It appears to be still a moot question whether really good accommodation, with decent food fit for invalids, can be obtained anywhere up the Nile, and if these few lines provoke replies from those who have some real knowledge of Egypt so much the better.

MR. DILLWYN'S LUNACY BILL.

THE Council of the Midland Medical Society has unanimously decided to hold a special meeting at Birmingham on the 21st inst., for the purpose of considering the proposed legislation for the amendment of the Lunacy Laws. The discussion will be opened by an address which Dr. G. F. Bodington has been invited by the Council to deliver, and will have special reference to the responsibilities of members of the medical profession. Gentlemen who desire to attend the meeting are requested to communicate with the President of the Society, Herbert Morgan, Esq., Market-street, Lichfield, or with the Secretary, Mr. John Garner, 85, Newhall-street, Birmingham.

THE METROPOLITAN HOSPITAL SUNDAY FUND.

THE Council of this Fund will meet on the 19th inst. at the Mansion House to make arrangements for the Hospital Sunday collection, and to receive the report of the General Purposes Committee. The report will have reference chiefly to the tabulation of the valuable information possessed by the Council, but now only available for the use of the Distribution Committee. We sincerely believe that the Council will best please its constituents and the participating charities by getting and giving the fullest information possible as to the principles upon which its awards are based. Publicity is the best answer to criticism.

"ONLY A DOCTOR."

THE *Gazette* of Friday last is conspicuous for the folly and short-sightedness of overlooking the personal courage displayed by Surgeon Reynolds at Rorke's Drift. Lieutenants Chard and Bromhead are rewarded with the Victoria Cross, and no one can grudge these grandly-earned honours; but the surgeon who gallantly—yes, we advisedly say, *gallantly*—relieved the wounded under fire, cheered his men, and carried ammunition to keep the combatants supplied while in action, is left without recognition. He was "only a doctor." In the Ashantee war the V.C. was given simply for carrying a dead body out of range; but the performer of this brave deed was a combatant. To tend the wounded and save life under fire is a service not worthy of notice when rendered by "a doctor." Lord Chelmsford may be a gallant and successful general, and the military authorities at home may have the good of the service at heart, but this is scarcely, perhaps, the way to show it.

EARLY HOURS AT THE MIDDLESEX HOSPITAL.

A CORRESPONDENT writes to THE LANCET complaining that all patients who can get out of bed are compelled at the Middlesex Hospital to rise at four A.M., "just at the time when sleep hangs heavy on the eyes." As the authorities of this useful institution should have an early opportunity of replying to the statement, we quote it without delay.

VIVISECTION.

A PARLIAMENTARY paper has been issued containing a report showing the number of experiments performed on living animals during the year 1878 under licences granted under the Act 39 and 40 Victoria, cap. 77, distinguishing painless from painful experiments. In England and Scotland the total number of experiments was about 481; of these 317 were performed under the restrictions of the licence alone, 87 under special certificates for experiments, without anæsthetics, 30 under certificates dispensing with the obligation to kill the animal before recovery from anæsthetics, and 47 under certificates permitting experiments in illustration of lectures (use of anæsthetics obligatory). The inspector (Mr. George Busk) is of opinion that the extreme number of cases in which an amount of suffering worth notice was inflicted could not have exceeded 40. In Ireland the total number of experiments performed was 24, and it appears that in no case was pain inflicted.

THE VACCINATION (IRELAND) BILL.

THE Bill introduced into the House of Commons (by Mr. Lowther and the Attorney-General for Ireland) to amend the law as to vaccination in Ireland appears to be designed to assimilate that law, in several important respects, to the vaccination law of England. It provides for children being vaccinated within three months after birth, for a proper inspection of the result of vaccination, for the transmission of certificates of successful vaccination to the registrar, for an increased scale of pay for successful vaccination and revaccination, for the taking of lymph, &c.

NAVAL NOTES.

MR. WILLIAM CREE, who entered the service some three years ago, has, according to the *United Service Gazette*, requested to be allowed to resign his commission. The reasons are not given, but, in spite of the paucity of medical officers at the present time, the request was complied with. During the past four years there has been a deficiency of forty-six surgeons in the Royal Navy. Two fleet surgeons have been appointed to the Chatham Dockyard within a very recent period. Our contemporary says that the officer first appointed requested at once to be superseded because the house hitherto appropriated to the senior medical officer had been given to another official, the doctor being located in smaller and much less convenient quarters. If this be the case, we cannot wonder that the service is looked on with suspicion by the juniors of the profession, nor can "my lords" themselves wonder at the paucity of candidates. Has not the Medical Director-General something to say when such an occurrence takes place, or is his voice of remonstrance disregarded?

THE THIRD INTERNATIONAL HYGIENIC CONGRESS.

THE programme of the third International Congress on Hygiene, which is appointed to be held in Turin next year (1880), under the presidency of Professor Pacchiotti Giacinto, has just been issued. It is as excellent a specimen of a "paper plausibility," in its double dress of Italian and French, as were the programmes of the previous congresses. We note the fact of publication of the programme for the information of those who are interested in the matter.

THE FORTY-SECOND REGIMENT.

FROM a return issued on the 8th instant, it appears that on January 31st last the 42nd, which was then 634 strong, had 116 men suffering from "ague." The regiment left Cyprus for Gibraltar Nov. 19th, 1878, 657 strong.

THE CASE OF MR. MILLERCHIP.

AT a numerously attended meeting of the Council of the Poor-law Medical Officers' Association, held on Tuesday evening at the offices, Bolt-court, London, Dr. Joseph Rogers, the president, in the chair, a resolution was passed strongly condemning the severe sentence passed on Mr.

Millerchip, and expressive of the regret of the Council at the course taken by Mr. Cross, the Home Secretary.

SMALL-POX is reported to have broken out, and to be actively spreading, in Canning Town, West Ham. At a recent meeting of the local board the medical officer of health, it is stated, recommended that revaccination should be universally adopted, but information is not given of the means he suggested by which this excellent practice is to be carried out. West Ham, we believe, has two infectious-disease hospitals within its boundaries; one belonging to the local authority, which rendered good service during a previous prevalence of small-pox in the district, and one belonging to the Poplar Board of Works. This latter hospital, we understand, is capable of accommodating seventy patients.

A PAINFUL case is reported from Sheffield of a pauper, suffering from advanced heart disease, being removed to the workhouse, and, while in the act of walking to a ward, falling down in fatal syncope. The question arose as to whether there had not been carelessness on the part of the workhouse officials in not having the patient carried to the ward, but at an inquest upon the body the jury did not feel justified in adding more to their verdict stating the cause of death than that the treatment the man had received at the workhouse had not been satisfactorily explained, and advising that the attention of the guardians should be called to the question.

THE *Shipping Gazette* reports that the first prosecution under the Canal Boats Act occurred at Doncaster some few days ago, when the owner, who lived and slept in his own vessel, was fined 5*s*. and costs for not having had the boat registered. As we predicted many months since, the operation of the Act is very partial and unsatisfactory, and the provisions are so fragmentary that the measure will do little else than allay philanthropic clamours for so-called "paternal" legislation on the subject.

THE latest news from the hospitals of the Russian army of the South—that is to say, the army on the Danube and in Bulgaria—now about three weeks old, states that the number of the sick had been reduced to 3600. Of the sick at Rustchuk 700 were then about to be removed to Russia; of the sick at Bourgas 1500, it was reported, would be in a state for removal in a fortnight, or thereabouts.

THE Council of the Royal College of Surgeons in Ireland have arranged that from the 1st of next August every candidate for the diploma in surgery of the College shall be obliged to obtain a certificate of proficiency in vaccination, and shall also be liable to be examined upon the subject at his final examination.

DR. BRIDGES, one of the general inspectors to the Local Government Board, has much "exercised" the Shoreditch Board of Guardians by continuing to press upon them the great necessity of appointing an assistant resident medical officer for their union infirmary.

MR. SPENCER WELLS has been elected an honorary member of the Royal Academy of Medicine of Belgium, in consideration of the "great part he has taken in scientific progress." It is always pleasant to record Continental recognitions of the merits of British surgery.

THE Council of the Royal College of Physicians recommend Charles Darwin, Esq. F.R.S., as Baly Medalist for 1879.

DR. ISAAC BALFOUR, of Edinburgh, has been appointed to the chair of Botany in Glasgow University.

DR. CHEADLE and Mr. MALCOLM MORRIS have been appointed joint-lecturers on skin diseases at St. Mary's Hospital Medical School. Such appointments in general hospitals are the true antidote to the evil of special hospitals.

SURGEON-MAJOR FRANK POUT, Surgeons J. Anderson and A. R. Lundy, have been detailed for duty in Burmah with the 43rd Regiment, in view of active operations being necessary on the Burmese frontier.

SURGEON-MAJOR WILLIAM CREAGH has been appointed to the medical charge of the Convalescent Depôt at Darjeeling, *vice* Surgeon-Major Sam Black Roe, M.B.

THE ROYAL COLLEGE OF SURGEONS.

ON Saturday afternoon last a deputation of teachers from the metropolitan schools waited on the Committee on Examinations of the College in support of the memorial which had been presented to the Council urging some modifications in the present system of conducting the Primary Examinations. Mr. Thomas Smith and Professor Burdon Sanderson were the chief speakers. They pointed out that at present the results of the examination were not as certain as could be wished, and that occasionally the best students from the schools were referred, whilst inferior candidates succeeded in passing. They hoped that whatever changes might be adopted would not increase the severity of the examination, but diminish its uncertainty. To attain this end, they suggested an increase in the number of written questions, especially in physiology, and the separation of the two subjects of anatomy and physiology by setting a paper in each subject and marking them separately, instead of including them in one paper, as at present. It was also thought that great benefit would result if the examinations in anatomy and physiology were conducted by different examiners, according to the subjects to which they had paid most attention. The deputation was also anxious that the amount of comparative anatomy required for the primary fellowship should be defined and scheduled, and that a separate examiner should be appointed in this subject. Some conversation between the committee and the deputation as to preparing a schedule in physiology also led to the suggestion that Prof. Sanderson should draw one up embodying his views, and lay it before the committee, and he promised to do so. The greatest difficulty seemed to be in the question of the limitation of time at the *viva voce*. The teachers thought that this occasionally determined the rejection of a candidate who would have passed if a longer time were given to him, but to carry out such an alteration the present system would have to be completely changed. Now a candidate comes under the notice of the examiners at every one of the four tables, either in the written or the *viva voce*, the arrangement being that the examiners who read his paper have no share in his *viva voce*, which devolves on all the others. At every other examining board the same examiners read the written papers and conduct the *viva voce*; they are consequently enabled to lengthen or shorten the oral examination as the quality of the written answers may determine. The president of the committee, Prof. Humphry, promised that the suggestions should have every consideration, as the authorities of the College were most anxious to make the examinations as perfect as possible. The deputation retired, after having thanked the members of the committee for their courtesy and attention.

At an ordinary meeting of the Council of the Royal College of Surgeons, held on Thursday evening, the President, the two Vice-Presidents, Sir James Paget, Messrs. Humphry, Marshall, Savory, Holmes, and Erasmus Wilson

(*ex officio*), were appointed the Erasmus Wilson Fund Committee. Mr. Hancock's motion to throw open the examinations for the licence of dental surgery to all registered dentists *sine curriculo*, was seconded by Mr. Humphry, but did not receive any further support, and was rejected by a full majority. The request of the ophthalmic surgeons for compulsory instruction and examination in ophthalmology was refused; as likewise was that of the obstetricians, for an extension of the instruction and examination in midwifery. The Jacksonian prize was presented to Mr. Priestley Smith for his essay. Permission was given to Mr. Smith to publish his essay, and he was allowed temporarily to remove the preparations and drawings illustrating it.

THE AFGHAN WAR.

THE Brindisi mail of Monday last brings us letters from the forces operating in and beyond the Khyber Pass and in the Kurrum Valley. During the last few weeks not many changes had occurred in the distribution of the troops and the medical arrangements connected with them. An advance on Cabul was expected to take place as soon as the snow on the passes had cleared off sufficiently to allow passage for artillery, baggage, camels, and sick transport. In view of this Sir S. Browne's division had concentrated on the Jellalabad plain, the 2nd division, under Major-General Maude, V.C., taking charge of the entire line of communication from Peshawur to Jellalabad, a distance of nearly ninety miles. The move to the Gundamak heights of the greater part of the European troops of the 1st Division was to commence in a few days; for the present the field hospital will be encamped on an elevated plateau, water being good and abundant there. The health of the troops was fairly good, but the weather was sensibly hotter, the sun in the middle of the day being felt excessively through the thin covering of a tent. Gundamak, the elevation of which is 4000 feet, will, it is believed, be a cool and healthy encampment for the summer months. Coming to the 2nd Division, it is intended, we learn, to canton the majority of the European troops at Landi Kotal; this plateau is situated at an elevation of 3700 feet above the sea, and is two miles and a half long by one and a half wide. It will probably become a permanent military garrison—the advanced post of our new "scientific frontier." Held, however, as at present, tentatively, the erection of barracks would be premature, and for this season the men will be located in double tents covered with a "chopper" roof, while, as quickly as they can be obtained and set up, huts consisting of an iron frame and roof, covered with mud, will be made use of. Numerous borings have been made by the Royal Engineer department, and excellent water found at depths varying from 60 to 70 ft. Sites on the adjacent hills have been inspected and selected for sanitaria. Some of them are as high as 4900 ft. above sea level, and should be proportionately cooler. On these sick and weakly men will be quartered. During the very hot months, or between May and October, sending back sick to the base hospitals at Peshawur, or to the convalescent depôt at Murru, is out of the question. The main section of the field hospital has been already established at Lundi Kotal under Surgeon-Major J. H. Wright; the second half at Busowal, twenty-six miles further on the Jellalabad road, under Surgeon-Major Shaw. Each of these is fairly well equipped, and so arranged as to be split up into two, thus forming four separate and complete units, any one of which can be moved off at a few hours' notice should any military exigency require a sudden advance of troops. Thus, looking at the chronic turbulency of the tribes in the vicinity, is at any moment to be anticipated.

The increased number of native troops at Ali Musjid and Dakka has necessitated the establishment of field hospitals for natives at these stations.

In the Kurrum Valley several medical changes have taken place, consequent on the visit of Sir Frederick Haines, the Commander-in-Chief, and Surgeon-General Kerr Innes. Kohat, which at this season is not only very hot, but excessively malarious, will be garrisoned entirely by native troops. The field hospital there has accordingly been advanced to the Peiwar heights, which range from 6000 ft. to 9000 ft. high, and a plateau on one of these will be the medical base for the summer months; water and fuel are abundant. General Roberts' force here has been increased by the addition of the 67th Regiment and the 92nd Highlanders. The entire length of the Kurrum Valley, calculated roughly at seventy miles, is one gradual rise after leaving Thull to the village of Peiwar, at the top of the crest. Water is everywhere plentiful, rice cultivation is universal, and fevers of the malarial type are, in the hot months, exceedingly prevalent. To avoid exposing our soldiers to their deleterious influence, as far as is compatible with military necessities, the four posts held for strategic reasons between Thull and the Pass itself will be garrisoned by troops of the Native Contingent, one company of Europeans occupying a village 1500 ft. above the valley. The men of the Royal Artillery and 8th King's, who have spent the whole of the winter months in the Peiwar, and have often been snow-bound for weeks, are looking healthy and robust, contrasting with the pallid, weakly countenances of their comrades, who have not had the bracing advantages of campaigning high up in the mountains.

Correspondence.

"Audi alteram partem."

CARBOLIC ACID AND DEATH AFTER AMPUTATION AT THE HIP-JOINT.

To the Editor of THE LANCET.

SIR,—You report the discussion at the Clinical Society on the 18th April of Mr. Gould's case of amputation at the hip-joint ending fatally in sixty-eight hours, after progressing favourably for forty hours. The reporter, whose general accuracy will be admitted by all, describes the post-mortem appearances as consisting of black coagulum occupying the veins of the left foot, leg, and thigh, reaching just into the common iliac vein. The report closes with this sentence. "He (Mr. Gould) attributed the thrombosis to carbolic-acid poisoning." Mr. Gould certainly suggested that the coagulated state of the blood was the cause of death, and was itself possibly caused by the carbolic acid. But he did not put it so decidedly as your reporter would imply. The time was up or I would at the meeting have ventured to express my regret that a surgeon, so sound in antiseptic faith and practice as Mr. Gould, on the strength of an isolated case, should have broached so doubtful a theory. Amputation at the hip-joint is a grave operation. It will be often followed by death under every variety of practice, and for an event so common before the use of carbolic acid we need not seek an explanation in its action. But, as far as I know, the records of cases of death by actual carbolic-acid poisoning refute Mr. Gould's theory. In his case the man did well for forty hours, and up to this time exhibited no signs of carbolic-acid poisoning, intestinal, cerebral, or urinary. The only constitutional indication of the presence of some carbolic acid in the system at the later stage of the case was the not uncommon one of a dark appearance of the urine. Even if thrombosis in the veins of the left leg were a sufficient explanation of death, this cannot be considered a note of carbolic-acid poisoning. So far from thrombosis being such a sign, the reverse would seem to be the case. In THE LANCET of March 1st, 1873, a case of poisoning by carbolic acid in St. George's Hospital is recorded by Mr. T. H. Brabant. It is distinctly said that "the blood was *uniformly fluid*, and on exposure became of a bright-red colour." In THE LANCET of June 21st of the same year another fatal case is reported, under the care of Dr. Russell, of the General Hospital, Birmingham. The following are short extracts from the account of the autopsy, twenty-four hours after death:—"Rigor mortis was persistent. After ligaturing the venæ cavæ close to the heart, the right side was found to contain three ounces of blood, which was of a dark colour, and *quite fluid*. This was the case also in the large vessels. ..... The brain contained much venous blood,

as did also the sinuses. *The blood was quite fluid.* ..... The whole brain had a strong odour of carbolic acid."

I do not know whether antiseptic surgery will be able to reduce the mortality of amputation at the hip as it has reduced the mortality of other grave surgical procedures, but I am sure my friend Mr. Gould will forgive me for showing reason for acquitting it of any blame for the production of thrombosis in his case. It may seem bold in a general practitioner to take part in such a discussion; but the question I raise is not a surgical one, and even if it were, the antiseptic system applied to surgery is too marvellous in its results for even a general practitioner to be indifferent to any unfounded suggestion which might retard its general adoption.

I am, Sir, your obedient servant,

Highbury, May 5th, 1879. JAMES GREY GLOVER.

To the Editor of THE LANCET.

SIR,—In a recent discussion at the Clinical Society I spoke of a second case of amputation at the hip by a modified method, which was then doing fairly well. It is only right that I should say that near the end of the third week lung complications set in, which proved fatal. No post-mortem was allowed. Kindly give me the opportunity of saying this in THE LANCET, in the Hospital Reports of which the operation was not long ago described.

Your obedient servant,

Birmingham, May 5, 1879. FURNEAUX JORDAN.

GRATUITOUS ADVICE.

To the Editor of THE LANCET.

SIR,—When visiting a patient a few days ago, I was addressed by his wife thus:—"Oh, Mr. Scott, I am taking bromide of potassium, fifteen grains at bedtime. The other day we were travelling from London, and in the carriage was a gentleman, who told us he was attached to the Privy Council Office. And he said to me, after prescribing for some fellow-travellers: 'You ought to take bromide of potassium; let me see, how old are you? Ah, yes (on my telling him), well fifteen grains is not a large dose, but it is enough for you at your age. Put two drachms into an eight-ounce bottle, and take a tablespoonful at bedtime.'"

I, Sir, did not question my patient's wife too closely as to how she got into conversation with this gentleman or was led so to describe her condition that he should declare that she "*ought* to take bromide of potassium." I gathered, however, that the prescriber, whoever he was, did not write any one of the prescriptions he seems to have bestowed so freely. In the present instance the memory seems to have served well enough, or, at any rate, to have led into no grave error; but who can say the same of the others?

Surely, Sir, if the Government Inspectors are generous enough to look after, in their spare moments, individual as well as public health, they should at least take care to *write* their prescriptions.

But I would also fain ask (always supposing this gentleman to be such as he represented himself) whether, in future, he would not do well to apply himself to his special duties and not deprive his poorer or humbler brother doctors of any of their hardly-earned fees by means of his gratuitous advice? Of the correctness of the above story there is no room for doubt.

I beg to remain, Sir,

Yours faithfully,

Bridport, April 23, 1879. FRANCIS SCOTT.

PARLIAMENTARY PROCEEDINGS.

HOUSE OF COMMONS.

Monday, May 5th.

THE CLOTHING FACTORY AT PIMLICO.

Mr. MUNDELLA asked the Secretary of State for War whether he had appointed a committee to inquire into the grievances of the workers in the Army Clothing Factory at Pimlico; and, if so, whether he would state to the House the persons composing the committee, and would furnish their report when completed; and when he would lay on the table of the House, as promised, the new and old scale of wages paid in the Clothing Factory and the changes made in the regulations of that establishment.

Lord E. CECIL: A small committee of three gentlemen, over whom the hon. member for Oldham has consented to preside, are about to inquire into the recent grievances of the operatives in the Army Clothing Factory at Pimlico. The committee will report for the information of the Secretary of State and of myself, and it will be for further consideration hereafter whether the report shall be made public or not. As I said on a previous occasion, there will be no objection to laying upon the table of the House the old and new scale of wages paid in the Clothing Factory, and the proper time for doing that, I think, will be when the inquiry has taken place.

THE CONTAGIOUS DISEASES ACTS.

Colonel LOYD-LINDSAY informed Sir Harcourt Johnstone that the Government proposed to at once appoint a select committee to inquire into the operation of the Contagious Diseases Acts. The committee would consist of fifteen members, ten to be nominated in the usual way and five to be added by the committee of selection, the object being to secure an entirely impartial tribunal.

Wednesday, May 7th.

THE ARTISANS' DWELLINGS ACT EXTENSION BILL.

Mr. M'CULLAGH TORRENS moved the second reading of the Artisans' Dwellings Act (1868) Extension Bill. Its object is to amend that Act, mainly by restoring to it the compensation clauses, the omission of which by the Lords has made it entirely inoperative.—Mr. ISAAC, who had given notice of his intention to move the rejection of the Bill, withdrew his amendment on the understanding that amendments would be introduced in Committee, and Sir H. SELWIN-IBBETSON signified that the Government would assent to the second reading, though they were of opinion that the clauses would require careful consideration in Committee.—Sir M. RIDLEY said the Home Secretary heartily approved the Bill, and wished it to be known that within three years all the sites cleared in the metropolis would be covered by artisans' dwellings.—Mr. GOLDNEY, Sir J. M'GAREL-HOGG, Sir S. WATERLOW, and Mr. MARTEN spoke in favour of the Bill.—Mr. BRUEN approved its extension to Ireland, and Sir J. KAY SHUTTLEWORTH expressed a hope that something in this direction would be speedily done for the small towns and rural districts.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed the Primary Examination in Anatomy and Physiology at meetings of the Board of Examiners on the 1st, 2nd, and 5th inst.:—

C. R. P. Faddy, E. G. A. Walker, John W. Yeatmen, G. A. Mac Nutt, Roland D. Brinton, G. N. Stephen, J. B. Brewitt, Henry C. Bevan, William A. Payne, George T. Clapp, John W. Blampied, Arthur G. Salmon, Oscar W. Clark, Henry B. Tait, James Callaway, William B. Ray, Charles Harrison, Thomas E. Carter, Walter Cooper, Walter O. Trotter, and Herbert C. Alderton, St. Bartholomew's Hospital; Thomas Unicume, William H. Hart, A. G. S. Mahomed, Henry Blatherwick, L. E. W. Stephens, Frederick Eastes, George Utting, George T. Woolley, R. H. Perks, W. S. N. Shorthouse, Sidney O. Stuart, and John J. Palmer, Guy's Hospital; Richd. B. Hardwicke, Sheffield and St. Mary's Hospital; Leonard W. Bickle, Edwin C. Green, W. T. Crick, W. G. P. Alpin, John Harrison, Robert M. Bruce, and J. P. C. Dillon, St. Thomas's Hospital; Walter S. Warliters and A. T. Bown, St. George's Hospital; Malcolm Cowan, Ernest M. Knowling, Claude S. Sparkes, Arthur R. Edwards, and E. M. Crookshank, King's College; Charles Stonham, Frederick D. Irvin, and Alfred Munckton, University College; M. E. Clough, Sheffield and St. Bartholomew's Hospital; Hugh Stott, Laurent Déqué, Wm. Steir, Herbert J. Dyson, and R. W. Wilson, St. Mary's Hospital; Herbert Canton and Bernard C. Scott, Middlesex Hospital; F. M. Pedley, Guy's Hospital; James J. Pratt and William H. Corey, Westminster Hospital.

Of the 150 candidates examined during the past and present week, 31 failed to reach the required standard, and were referred for three, and 8 candidates for six, months' further anatomical and physiological study.

[The name of Charles H. Willey (Edinburgh), who passed the Primary Examination on the 28th ult., was accidentally omitted from the list sent to THE LANCET last week. — In the Primary Examination list published on the 19th ult., for "Thomas Aldous" read Robert Aldous.]

APOTHECARIES' HALL. — The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on May 1st :—

Crisp, Thomas, Beaufort-street, Chelsea.
Downes, Charles Hagger, White-street, S.E.
Dyson, Thomas Sheppard, Sheffield.
Fellowes, Hy. Thomas Abdy Butler, Chobham, Surrey.
Griffiths, Herbert Tyrrell, Devonshire-place.
Midwinter, Edw. James H., Gloucester-road, New Barnet.
Penny, Edward, Rushton, Blandford.

The following gentlemen on the same day passed the Primary Professional Examination :—

Joseph Ludovic Bousignac, St. Mary's Hospital; Charles Nelson Goldney and Robert Graham, Charing-cross Hospital; Frank Bingley Pullin, Aberdeen University.

UNIVERSITY OF ABERDEEN. — The following is a list of those who graduated at Aberdeen on April 26th :—

THE DEGREE OF M.D.

Anderson, James, M.B., C.M., Aberdeen.
Bell, George Pearson, M.B., C.M., Leicester.
Bennett, Arthur, M.B., C.M., Stawell, Victoria.
Clippingdale, Samuel D., M.B., C.M., St. George-in-the-East.
Cran, Robert, M.B., C.M., North Lackimpur, India.
Evans, Frederick William, M.B., C.M., Cardiff.
Evers, Benjamin, M.B., C.M., London.
Gray, Robert Aikman, M.B., C.M., Montrose.
Heelas, James, M.B., C.M., London.
Jay, Henry Mason, M.B., C.M., Chippenham.
Mackay, John, M.B., Dunkeld.
M'Aldowie, Alex. Morrison, M.B., C.M., North Staffordshire Infirmary.
Stewart, William Lemmon, M.B., C.M., Keith.
Trail, James William Helenus, M.B., C.M., Aberdeen.

THE DEGREE OF M.B.

Alexander, Lewis Daniel, M.A., Aberchirder, Banffshire.
Batchelor, George Arthur, London.
Burton, Alfred Henry, Sevenoaks.
Butter, John Kerr, Forfar.
Clarke, William, M.A., Deskford, Cullen.
† Coutts, George, Kincardine O'Neil.
† Davies, Morgan, Llangwyryfon, Cardiganshire.
Ellis, Heber Dowling, Eastbourne.
Field, Ernest, Bath.
† Fraser, Donald Manson, M.A., Invergordon, Ross.
Gibbs, Heneage, New Wandsworth.
Glass, Charles, M.A., Glenrinnes.
Kai, Ho, Hong-Kong.
Legge, George Alexander, M.A., Huntly.
Low, Charles, Dundee.
Macdonald, Peter William, Glenlivet.
Mackie, William, M.A., Fyvie.
Michie, William Adam, Aberdeen.
Mumby, Bonner Harris, Gosport, Hants.
Mutch, Forbes Robertson, Udny.
* Needham, Joseph, London.
Neilson, William Henry, Bath.
Rae, George, M.A., Aberdeen.
Reid, Archibald, Glenbucket.
Shand, George Jolly, Aberdeen.
* Skinner, David, M.A., Inverurie.
Smith, Ernest Barratt, London.
Smith, James Murray, Forfar.
† Spooner, Frederick Henry, Plymouth.
Stericker, William, Brompton, Yorks.
Tawse, William, Logie-Coldstone, Aberdeenshire.
Taylor, George, Ladlesford, Fyvie.
Thomson, Henry, Aberdeen.
Tonge-Smith, Winckworth, London.
Van-Geyzel, John Lawrence, Ceylon.
* Walker, James Hutchison, M.A., Peterhead.
Wilson, George Alexander, Huntly.

THE DEGREE OF C.M.

Alexander, Lewis D.	Mutch, Forbes Robertson.
Batchelor, Geo. Arthur.	Needham, Joseph.
Burton, Alfred Henry.	Neilson, William Henry.
Butter, John Kerr.	Rae, George.
Clarke, William.	Reid, Archibald.
Coutts, George.	Shand, George Jolly.
Davies, Morgan.	Skinner, David.
Ellis, Heber Dowling.	Smith, Ernest Barratt.
Field, Ernest.	Smith, James Murray.
Fraser, Donald Manson.	Spooner, Frederick Henry.
Gibbes, Heneage.	Stericker, William.
Glass, Charles.	Tawse, William.
Kai, Ho.	Taylor, George.
Legge, Geo. Alex.	Thomson, Henry.
Low, Charles.	Tonge-Smith, Winckworth.
Macdonald, Peter Wm.	Van-Geyzel, John L.
Mackie, William.	Walker, James H.
Michie, Wm. Adam.	Wilson, Geo. Alex.
Mumby, Bonner Harris.	

* With highest academical distinction.
† With honourable distinction.

The number of graduates promoted to the degree of M.D. on this occasion is 14, as compared with 30 last year; while the number receiving the M.B. and C.M. degrees is 37, as compared with 36 in 1878. The number of students who have passed part of their examinations this year is 75, as against 57 last year. — The John Murray Medal and Scholarship was equally divided between David Skinner, M.A., and James H. Walker, M.A., as the most distinguished graduates of their year.

UNIVERSITY OF ST. ANDREWS. — The following gentlemen, having passed the required examinations, obtained the degree of M.D. on April 22nd :—

Beaney, James George, F.R.C.S.E., L.K.Q.C.P.I., L.M., Melbourne.
Blackwood, Thomas, L.R.C.P. Ed., L.R.C.S., Wednesbury.
Dearden, John, M.R.C.S.I., L.S.A., Church, near Accrington.
Hague, Samuel, L.R.C.P. Ed., L.R.C.S., Camberwell.
Kempe, Charles Patrick, M.R.C.S., L.M., L.S.A., London.
Oswald, James W. J., L.R.C.S. Ed., L.R.C.P. Ed., L.S.A., London.
Pearce, Charles Worth, F.R.C.S. Ed., L.R.C.P.L., L.S.A., London.
Roberts, Owen, M.R.C.S., L.M., L.R.C.P. Ed., L.S.A., Notting-hill.
Steel, William Stott, M.R.C.S.E., L.A.C.E., Torquay.
White, Samuel Shapland, M.R.C.S., L.R.C.P., London.

At the same time the degrees of M.B. and C.M. were obtained by the following gentleman :—

Moffat, Robert Maxwell, L.R.C.P. Ed., Sidmount, Moffat.

ROYAL COLLEGE OF SURGEONS IN IRELAND. — At the April examinations the following gentlemen obtained the licence in Surgery of the College :—

Richmond Robert Allen, William Allen, William Convngham Ashe, Hubert A. Auchinleck, Edward Frederick Sheehy Barry, Joseph Henry Bond, Waithorpe Benjamin Browning, Kyran Buggy, Johnson Croly, John Joseph Daly, Augustus Newton Dickinson, Patrick Samuel Dingenan, Henry Hamilton Dwyer, William B. Eames, Arthur England, Alfred Ewing, Edward Femican, George E. Fisher, Thomas Fitzmaurice, John Joseph Hayes, Thomas Jackson, Joseph King, John Vincent Lentaigne, Edward Patrick Meagher, Adam Mitchell, William O'Donnell, Michael Joseph O'Shea, James H. Parkinson, William Pooley, Thomas Emile Ryan, Joseph Sangan, Patrick Smith, George Harrison Young.

At a meeting of the Council of the Royal College of Surgeons in Ireland, held last Tuesday, the following were elected Examiners for the ensuing year :—Examiners for Letters Testimonial and the Fellowship: Henry Gray Croly, William Frazer, Edward O'Grady, W. O'Leary, Benjamin Wills Richardson, Edward Stoker, Robert Swan, and William Thomson. Examiners in Midwifery: Henry Croly, John R. Kirkpatrick, and W. Smyly. Examiners in General Education: Frank James Davys, Michael Joseph Malone, and Robert Morton. It will thus be seen that all the outgoing examiners were re-elected with the exception of Mr. Wheeler, who has been replaced by Mr. Croly.

AT Shepton-Mallet a new hospital is to be built upon ground given by H.R.H. the Prince of Wales as Duke of Cornwall.

A SELECTION of medical and scientific books, from the library of the late Dr. John Birt Davies, has been presented to the Birmingham Medical Institute through Mr. Oliver Pemberton.

DR. FREDERICK E. RYOTT and Dr. Henry Watson have been placed on the Commission of the Peace for the borough of Newbury; and Mr. F. E. Barton, M.R.C.S. Eng., for the borough of Dover.

THE deaths registered in London last week numbered 1648, representing a rate of mortality of 23·8, a lower rate than has been recorded in any week since the middle of February last. The seven principal zymotic diseases accounted for 217 deaths, 72 of these being attributed to whooping-cough, 53 to measles, and 26 to scarlet fever. Diseases of the respiratory organs exhibited last week a still further diminution in fatality, 429 deaths being placed to their account.

AT a meeting of the Poor-law Medical Officers' Association, on the 6th inst., it was decided that the annual meeting should be held at the Freemasons' Tavern on Tuesday, the 3rd of June, at 3 P.M. The members of the Association will dine together at 6 P.M.; dinner tickets, exclusive of wine, 7*s.* 6*d.* It is hoped that Poor-law medical officers will make every effort to attend on this occasion, and that they will as soon as possible signify their intention to be present to Dr. Rogers, 33, Dean-street, Soho, or to Mr. Wickham Barnes, 3, Bolt-court, Fleet-street.

THE Newport Abbot Guardians have, upon the recommendation of the Medical Committee, increased the salaries of the medical officers of the Ipplepen, Moreton, and Torquay districts, from £32 to £35, £41 to £50, and £85 to £100 per annum, respectively. The Walsall Guardians have increased the salary of Mr. Partridge, medical officer for the Darlaston District, from £50 to £70 per annum, and that of Dr. Maclachlan, medical officer to the workhouse, from £80 to £100.

MIDLAND MEDICAL SOCIETY.—The Society's prize of five guineas for Clinical Surgery has been awarded to Mr. Cornelius Suckling, and will be presented at the ensuing inaugural meeting.

BEQUESTS, ETC., TO MEDICAL CHARITIES.—Dr. Hugh Miller, of Broomfield, bequeathed £250 each to the Royal Infirmary, and the Western Infirmary, at Glasgow. The Fishmongers' Company have given fifty guineas to the North London Hospital for Consumption and Diseases of the Chest. St. John's Hospital for Diseases of the Skin, Leicester-square, has become entitled to £950 under the will of the Rev. Samuel Ashby.

UNIVERSITY OF LONDON.—The following Examiners for 1879-80 were elected at the meeting of the Senate on Wednesday, the 7th inst.:—Practice of Medicine: W. H. Dickinson, M.D. Surgery: G. W. Callender, F.R.S., and John Cooper Forster, M.B. Anatomy: Professor John Curnow, M.D., and Professor Redfern, M.D. Physiology: Philip H. Pye-Smith, M.D., B.A., and Professor J. Burdon-Sanderson, M.D., F.R.S. Obstetric Medicine: J. Hall Davis, M.D., and Henry Gervis, M.D. Materia Medica and Pharmaceutical Chemistry: Professor E. B. Baxter, M.D., and Professor Sydney Ringer, M.D. Forensic Medicine: Professor Ferrier, M.D., M.A., F.R.S., and Thomas Stevenson, M.D. Chemistry: Professor Debus, Ph.D., F.R.S., and Professor Dewar, M.A., F.R.S. Botany and Vegetable Physiology: W. T. Thiselton Dyer, M.A., B.Sc., and Maxwell T. Masters, M.D., F.R.S. Comparative Anatomy and Zoology: Professor E. Ray Lankester, M.A., F.R.S., and A. Milnes Marshall, D.Sc., M.A. Geology and Palæontology: Professor T. Rupert Jones, F.R.S., and R. Davies Roberts, D.Sc., M.A.

Medical Appointments.

ALLISON, A., M.D., L.R.C.S.Ed., has been appointed Certifying Factory Surgeon for the District of Loanhead, Edinburghshire.

BARRETT, Dr. L., has been appointed Medical Officer, Public Vaccinator, &c., for the Granard Dispensary District of the Granard Union, co. Longford, at £120 per annum and fees, and £16 per annum as Medical Officer of Health, vice Buckly, resigned.

BATTY, W. E. L., M.R.C.S., L.S.A.L., has been appointed Assistant House-Surgeon to the Liverpool Northern Hospital, vice Neale, promoted.

CLARKE, J., M.D., C.M., has been appointed Senior Resident Medical Officer to the Belfast Royal Hospital, vice O'Neill, appointed an Assistant-Surgeon to the Extern Department.

CLIPPINGDALE, Dr. S. D., has been appointed Assistant Medical Officer to the Infirmary and Workhouse of the Parish of St. George-in-the-East, Princes-street, vice Dale, appointed Medical Officer for the Sunderland District of the Sunderland Union.

CORBYN, F. H., L.R.C.P.Ed. & L.M., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the No. 5 District of the Battle Union, vice Blaker, resigned.

DUIGENAN, J. J., L.K.Q.C.P.I. & L.M., L.R.C.S.I., has been appointed Medical Officer to the Edenderry Union Workhouse, vice Gilligan, resigned.

DUKE, D., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the Corby District of the Kettering Union, vice Greaves, whose appointment has expired.

DURAND, R., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer and Public Vaccinator for the Orton District of the East Ward Union, Westmorland, vice Mutch, deceased.

ENNALS, C. T., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the Burwell District of the Louth Union, vice James, deceased.

FISHER, C. H., M.D., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the Milton District and the Workhouse of the Milton Union, vice Ray, deceased.

FLETCHER, J. H., L.R.C.P.Ed., L.F.P.S.G., has been appointed Medical Officer for the No. 6 District of the Oldham Union, vice Prestwich, deceased.

HARRIS, A. G. R., L.R.C.P.L., M.R.C.S.E., has been appointed Medical Officer to the Wandsworth Provident Dispensary, vice Archer.

LAWTON, H. A., L.R.C.P.L., M.R.C.S.E., &c., has been appointed Medical Officer of Health to the Lytchett District of the Poole Rural Sanitary Authority.

LEACH, H., M.R.C.P., has been appointed one of the Honorary Physicians to the Shipmasters' Society.

MCGEAGH, W., M.D., M.Ch., M.R.C.S., has been appointed House-Surgeon to the Liverpool Northern Hospital, vice Jones, resigned.

MIDDLETON, J., L.R.C.P.Ed., L.F.P.S.G., has been appointed Medical Officer to the Annandale and Springhill Collieries, near Kilmarnock, vice Smith, resigned.

NEALE, J. E., M.R.C.S., L.S.A.L., has been appointed House-Physician to the Liverpool Northern Hospital, vice McGeagh, promoted.

OLIVER, Dr. T., has been appointed a Physician to the Newcastle-upon-Tyne Infirmary, vice Bramwell, resigned.

RAJAONAH, L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Senior House-Surgeon to the Ingham Infirmary and South Shields and Westoe Dispensary, vice Fletcher, resigned.

ROBERTS, A., M.R.C.S.E., L.S.A.L., has been reappointed Medical Officer of Health for the Keighley Urban Sanitary District, at £75 for one year.

SEGRAVE, C., L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer, Public Vaccinator, &c., for the Monasterboice Dispensary District of the Drogheda Union, at £110 per annum and fees, and £20 per annum as Medical Officer of Health, vice Healy, resigned.

SELLS, C. J., L.R.C.P.L., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer for the Guildford District of the South-Western Railway, vice T. J. Sells, M.R.C.S.E., L.S.A.L., deceased.

SHIPTON, A., M.R.C.S.E., L.S.A.L., has been appointed Certifying Factory Surgeon for the District of Buxton, vice W. P. Shipton, M.R.C.S.E.

STEPHEN, W., M.D., has been appointed Medical Officer, Public Vaccinator, and Medical Officer of Health for the Parish of Glenelg, vice Webster, deceased.

SUCKLING, C. W., M.R.C.S.E., L.S.A.L., has been appointed Medical Tutor at Queen's College, Birmingham, vice Handford, resigned.

SUTTON, H. G., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer of Health for the Milton Rural Sanitary District, at £50 for one year, vice Ray, deceased.

WELLS, J., M.R.C.S.E., L.S.A.L., has been appointed Certifying Factory Surgeon for the District of Wolverhampton, vice Collins.

WILSON, A., M.B., C.M., has been appointed Certifying Factory Surgeon for the District of Mid-Calder, Edinburghshire.

WINN, J., L.K.Q.C.P.I. & L.M., L.R.C.S.I., has been appointed Medical Officer and Public Vaccinator for the Poulton District of the Tylde Union, Lancashire, vice Bowness, deceased.

Births, Marriages, and Deaths.

BIRTHS.

BELL.—On the 29th ult., at King's-Kettle, Fifeshire, the wife of James M. Bell, M.D., of a daughter.

BUSZARD.—On the 28th ult., at Northampton, the wife of Frank Buszard, M.D., of a daughter.

EVERS.—On the 8th inst., at South Kensington, the wife of B. Evers, M.D., Surgeon, Bengal Medical Service, of a son. (India papers please copy.)

LAPAGE.—On the 6th inst., at Nantwich, Cheshire, the wife of Clement Lapage, M.A., M.R.C.S., of a son.

MACALISTER.—On the 3rd inst., at Palmerston-road, Rathmines, the wife of Alexander MacAlister, M.D., of a son.

MEADOWS.—On the 1st inst., at Otley, Suffolk, the wife of George F. W. Meadows, M.R.C.S.E., of a son.

WILTSHIRE.—On the 2nd inst., at Wimpole-street, the wife of Alfred Wiltshire, M.D., of a son.

MARRIAGES.

HARDING—WILLS.—On the 18th February, at Christ Church, Geelong, by the Rev. Canon Goodman, George Clarence Harding, M.R.C.S.E., L.R.C.P.Ed., of North Lawn, Westgate-on-Sea, Kent, to Hortense Sarah Spencer, youngest daughter of the late Horatio Spencer Wills, Esq., of Geelong, Australia.

NEWMAN—FEATHERSTON.—On the 20th February, at St. Paul's Cathedral, Wellington, New Zealand, by the Ven. Archdeacon Thorpe, Alfred Kingcome Newman, M.B., C.M. Aberd., M.R.C.P.L., M.R.C.S.E., to Octavia (Ava), youngest daughter of the late Isaac Earl Featherston, M.D.

TREVOR—BROOKING.—On the 24th February, at Porvenir, Peru, Salusbury Lloyd Trevor, M.R.C.S., eldest son of E. S. R. Trevor, Esq., of Trowscoed, Montgomeryshire, to Annie Hunt B. Brooking, eldest daughter of the late John Brooking, Esq., of Dartmouth, Devon.

DEATHS.

BRIGGS.—On the 30th ult., at Shaw-heath, Stockport, William Briggs, M.R.C.S.E., aged 60.

BROWN.—On the 27th ult., at Rochester, Frederick James Brown, M.D., aged 55.

CHAMBERS.—On the 3rd inst., at Brighton, Charles Hall Chambers, M.R.C.S.E., Staff-Surgeon, R.N., retired.

EWART.—On the 1st inst., at Limefield House, Cheetham-hill, Manchester, Josephine Caroline, wife of John Henry Ewart, aged 21.

FLINT.—On the 1st inst., at Roper House, Canterbury, Horace Flint, M.B., aged 26.

GAYTON.—On the 30th ult., at Church-street, Spitalfields, William Gayton, Surgeon (in practice before August, 1815), aged 82.

GRIFFITHS.—On the 1st inst., at Torquay, Francis Thomas Griffiths, M.D., late of Sheffield.

HART.—On the 3rd inst., at Erith, Kent, Philip Neville Hart, M.B., M.R.C.S., aged 28.

JAMES.—On the 30th ult., at Park-row, Bristol, Joshua James, M.R.C.S.E., aged about 38.

LAMING.—On the 3rd inst., at Arundel, Richard Laming, M.R.C.S.E., aged 79.

LANE.—On the 28th ult., at Grosmont, James Lane, M.R.C.S.E., aged 87.

LEWIS.—On the 25th ult., at Upper Gloucester-place, Frederick Lewis, L.R.C.P.Ed., aged 40.

MYERS.—On the 5th inst., at 30, Euston-square, N.W., Fannie Elizabeth Maud (Lillie), the only and beloved daughter of H. R. Myers, Esq., L.F.P.S.G., aged 16.

REEVES.—On the 28th ult., at The Crescent, Carlisle, William Reeves, M.D.

RENDLE.—On the 1st inst., at Park-hill, Clapham-park, James Davy Rendle, M.D., aged 56.

TOMLIN.—On the 21st ult., at Worthing, William Tomlin, M.R.C.S.E., aged 52.

N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*

Notes, Short Comments, and Answers to Correspondents.

A SANITARY FABLE.

OUR excellent Transatlantic contemporary, the *Plumber and Sanitary Engineer* (which is so exceptionally rich in good matter) puts a question that has much occupied it of late into the following fabular form:—Three cunning foxes, who had failed to earn an honest living, determined to set up in a new line of business, so they formed a partnership in the speculative building line. The first, who pretended to be a horny-handed son of toil, took in skin-building at one-third the usual rates. The second did contract plumbing, and charged only half-price, making a fair profit by using poor materials. The last, who was only a special partner, set up as a doctor, and soon had a large practice from the houses finished by his partners. They finally admitted an undertaker into the ring, and are all now getting to be rich and respected. An ironical moral is added, "Do right and you will get along in the world"; for which we should prefer to substitute, "The survival of the fittest is a doctrine which applies equally to the operations of man in civilised life, and to the operations of nature in the field of animal life."

Mr. C. B. Keetley.—The paper shall be inserted in an early number.

A RARE AND FATAL COMPLICATION IN TYPHOID FEVER.

To the Editor of THE LANCET.

SIR,—The following case is a parallel one to that related by Mr. G. C. Franklin in THE LANCET of April 19th.

On November 11th, 1876, I was called to attend a girl, aged four years and nine months, who was stated by her mother to have been ailing since October 17th with lassitude, drowsiness, fever at night, diarrhœa, and some red spots on her chest and abdomen. The case was, doubtless, one of typhoid fever, and was probably half way through the fourth week. The mother was accurate as to the date; for on October 17th she was confined, and on that day she noticed that the girl seemed unwell, having been quite well previously. The case progressed fairly well up to November 17th, when a swelling, which rapidly increased, appeared in the left cheek. On the next day (18th) a black spot, which attained the size of a sixpence, appeared under the lower eyelid. On the 19th the swelling discharged pus into the mouth, and the same evening the slough under the eyelid separated; this was followed by free hæmorrhage. From the evening of the 19th acute necrosis of the left superior maxilla took place, sharp attacks of hæmorrhage occurring frequently. So rapid was the necrosis that on the morning of the 25th the cheek was quite separate from the bone, and the contents of the orbit could be raised from the orbital plate of the superior maxilla. The girl died on the evening of the 25th.

A doubtful case of typhoid had but recently occurred in the same family. The family, a large one, resided in a closely populated neighbourhood, where the water-supply was obtained from a well only a few yards distant from a large and over-full cesspit.

Yours truly,

H. A. LAWTON, L.R.C.P. Lond.,
Poole, April 24th, 1879. Medical Officer of Health for Poole.

Sanitas.—1. The Memorandum of the Local Government Board on Hospital Accommodation to be provided by the Local Authorities, and as to general management of hospitals; a personal visit to the Stockwell or Homerton Infectious Disease Hospitals of the Metropolitan Asylums Board for details of management.—2. Parkes's Manual of Practical Hygiene and Wilson's Handbook of Hygiene, both works published by J. & A. Churchill.—3. This is so much a matter of personal taste and wants that we cannot pretend to answer the question.

Anglicanus.—The degrees referred to confer a right of practice in every branch of the profession, recognised alike by the Courts and by the Local Government Board. No legal qualification is necessary for the practice of midwifery.

THE ELY GRAMMAR SCHOOL.

To the Editor of THE LANCET.

SIR,—My attention has been drawn to a statement in THE LANCET of April 26th, to the effect that notice has been served on the Governors of the Ely Grammar School by the Urban Sanitary Authority, requiring them to make certain arrangements for drainage, water-supply, &c. The Dean and Chapter of Ely are Governors of the Cathedral Grammar School, to which this statement may be supposed to apply, which I beg you to contradict in your next issue; for you may be assured that no such requirement has been made, nor is there any defect in the sanitary arrangements of the school that could give occasion for it. I have no doubt that the name of "Ely" has been put in by mistake for some other place. There is, indeed, no such locality at Ely as "Upper Hill-street," mentioned in connexion with the school.

As the statement has been copied into a country paper, it is important to contradict it promptly. Yours faithfully,

The Deanery, Ely, Camb., May 7th, 1879. C. MERIVALE.

SANITARY CONDITION OF GREEN-STREET COURTHOUSE, DUBLIN.

THE disgraceful sanitary state of this building has long been a subjec of reproach to the authorities, and recently the Judges have forwarded a memorial to the executive, which we trust will have the desired effect. The subject was brought under the special notice of the Corporation of Dublin at a meeting of that body held on the 5th inst., and the principal reason given for the delay in remodelling the building is that arrangements have not been completed for apportioning the cost of the improvements to the city, the county, and the Crown. The memorial states that those who preside in the Court, those who practise there, the jurors, and the witnesses have long complained of the want of space and accommodation which the building affords. The ventilation has been found most defective, giving rise to serious apprehensions of risk to the health of those whose duties oblige them to frequent the Court.

A Surgeon who has made One Hundred and Twenty Voyages across the Atlantic has forgotten to enclose his card.

CHOLESTERINE TUMOUR OF THE HORSE'S BRAIN.

To the Editor of THE LANCET.

SIR,—I beg to submit a description of a rare form of tumour occurring in the brain of the horse.

Some weeks after the reception of a severe wound in the flank, the recipient, an aged mare, of a very irritable disposition, showed signs of trismus, accompanied by general stiffness. The symptoms abated considerably by the fourth day, the patient lying down and rising with facility; but on the morning of the fifth she was unable to rise. The forelegs were rigidly extended, the rigidity occasionally giving way to clonic spasms and quivering; the gluteal muscles were very firm, and the hindlegs semiflexed, seeming to be the subject rather of paralysis than of tonic spasm; clonic spasm of the cervical muscles caused a frequent nodding of the head towards the chest; the whole body surface was morbidly insensible to irritation. The animal lay almost passive, sweating profusely the whole time, until the evening, when death resulted suddenly from asphyxia.

Autopsy revealed, in addition to the characteristics of this mode of death, congestion of the neurilemma of the crural nerve, supplying the injured parts. Some of the morbid appearances in the brain—i. e., the presence of a large quantity of serum, both in its substance and in the lateral ventricles, causing the organ to appear unusually large, general congestion, and considerable hardness—were, doubtless, due in great measure to the mode of death, the subservient cause being probably the presence of a rough, orange-coloured body (about the size of, and resembling, an ordinary raspberry) enveloped in the plexus choroides, and embolism of the vessels at the anterior (superior) part of the medulla oblongata, between which and the cerebellum, limited anteriorly (superiorly) by the middle peduncles, a considerable deposit of dark, red and black spongy-looking matter had taken place; this deposit presented a very novel appearance, being mottled with small pearly plates, which, when examined microscopically, were found to consist of crystallised cholesterine, the matrix in which they rested seeming to consist entirely of nucleated cells, possibly blood-corpuscles, and larger oval granular cells, its colour depending on changes in the effused hæmoglobin. The tumour in the plexus choroides, which was situate between the cerebrum and the corpora quadrigemina, below the pineal body, consisted of crystallised cholesterine, fatty globules, débris, and large oval granular cells. The crystals, on being treated with sulphuric acid, acquired an iodine colour, and lost their clear edges and angles. This growth differed from the former in being composed of very few cells, and containing a good deal of fat. This latter was probably the residuum of some former effusion; but I am unable to reconcile the appearance of so much cholesterine in the effusion between the cerebellum and medulla with the recent character of the deposit, and should feel grateful for any information upon cholesterine deposits in the brain, which are described by Dr. Lionel Beale in the "Microscope in Medicine" as extremely rare.

I remain, Sir, yours faithfully,

C. E. SMITH, M.R.C.V.S.,
Army Veterinary Department.

R.A. Camp, Woolwich, April 29th, 1879.

DIPHTHERIA IN ABERDEENSHIRE.

LAST year parts of Aberdeen suffered severely from diphtheria. The Commissioners of Supply of the County appointed a Committee to inquire and report on the subject, and it would appear that, at the request of the Committee, the Board of Supervision instructed Dr. Littlejohn to make an investigation. At a recent meeting of the Commissioners, a report was read from the Committee, including a report from Dr. Littlejohn, in which that gentleman described the condition of the several places which had been visited by the disease, and strongly urged the appointment of salaried medical officers of health and the establishment of infectious disease hospitals.

Mr. W. B. Stead.—The blue mould (*Aspergillus glaucus*) of Stilton cheese is developed during the process of natural decay. Sulphate of copper and sometimes arsenious acid are occasionally used to destroy the insects; the rind is then treated with these substances, and, if impregnated with them, becomes poisonous.

DISCREPANCY IN PRINT

SANITARY "TOMFOOLERY."

AT a recent meeting of the Truro Town Council, one of the members took occasion to condemn the annual report of the medical officer of health on account of its many details. He observed that there was no necessity for this, and that the particulars into which the medical officer of health thought fit to enter were calculated to do much injury to the town. Numbers of people, he added, according to his belief, would be kept away because of so much "unnecessary tomfoolery stuff in the report." This worthy Town Councillor does not appear to have observed that in speaking in this fashion he was admitting that there was very much in Truro sanitarily that needed amendment, and that he was equally indifferent to the sanitary welfare either of the people of Truro or of its visitors. Neither does he seem to have understood that the perpetration of the sort of "tomfoolery" of which he complains is one of the most important duties imposed upon the medical officers of health by the law in the interests of communities and of their visitors.

K. A. P.—Would our correspondent kindly write more fully, giving any clue to the former letter. We do not remember to have seen it, and have no record of its receipt.

MEDICAL EDUCATION IN THE UNITED STATES.

To the Editor of THE LANCET.

SIR,—In to-day's LANCET appears an annotation on "Medical Education in the United States." True, there is rottenness in medical education in the United States. The aspect it presents in many places is fully as dark as your note would lead one to think, and should cause every honourable member of the profession of any acquirements whatever in that country to blush with shame. In New York, where the material for the best of medical instruction is abundant, much of the greatest looseness in graduating men almost totally unqualified exists. In their eagerness for dollars and "largest classes" on graduation day, the faculties of that city forget that they are neglecting almost wholly the qualifications of the "M.D.s" with which they are so extensively inflicting both the profession and the people generally. This flooding of the country with young doctors is everywhere evident, and really good men who ought to live are frequently driven to the wall for bread-and-butter, both because of the number and the quackish ways of these ignoramuses. About sixty schools scattered over the country add annually to this flood.

It was hoped that the American College Association would at once begin a movement for a higher standard. This body was organised in 1876, made itself acquainted with the shameful condition of the medical schools of the country, and then talked dollars, and became a kind of college trades'-union. Not from this Association have sprung any reforms in the matter of medical education proper as yet. I hope its meeting this year may be more fruitful in this direction.

But there is an undercurrent in the profession of the United States demanding reform, which has already cropped out practically in the schools, one in each of the following cities: Chicago, Boston, Syracuse, Philadelphia, and Ann Arbor. Graded courses, extending over three years of nine months each, have in these schools replaced the wretched plan to which the annotation in to-day's LANCET refers, and which is still the one to be found in the remaining medical schools in the United States.

Yours faithfully,

Richmond-terrace, Clapham-road, May 3rd, 1879. A. C. M.

"THE HEATHEN CHINEE."

WE have received a huge chart, setting forth the cures wrought by "Doctor George On Lee," a Chinese quack in Sydney, accompanied with the statement that this enterprising Chinaman is making £25,000 a year out of the credulity of our colonial fellow-subjects.

Mr. J. Court.—The MS. is in hand.

DOCTORS WANTED.

To the Editor of THE LANCET.

SIR,—Having seen an advertisement in your journal for a medical man for the Clavering district of the Saffron Walden Union, I should like to give a little advice to any of my struggling brethren who would like to apply for the same, and that would be the same as *Punch's* advice to those about to marry, "Don't." I have tried it for three years, and have found it utterly impossible to live here on my professional income, and I believe that anyone coming after me would not make even as much as I did. I should not have remained here so long but that I have an objection to be a rolling-stone if I can avoid it. Even when any money is made by private practice, it is most difficult to obtain it. Being entirely an agricultural district, the people are liable to severe losses from bad weather, crops, &c., and many have left the place altogether, even since I came here. There are two opponents in the adjacent villages, who have all the good farmers for patients. There was a guarantee sum promised; but as yet it is in the womb of the future, as I have not yet obtained it.

I am, Sir, yours truly,

J. CRAVEN C. FORSAYETH, L.K.Q.C.P.I., &c.,
Medical Officer, No. 4 District, Saffron Walden Union.

Clavering, Essex, May 6th, 1879.

P.S.—I do not write from any spite or spleen, as I sent in my resignation of my own free will to the Board of Guardians.

POISONING BY ARSENICAL WALL-PAPER.

To the Editor of THE LANCET.

SIR,—Poisoning by arsenical wall-paper being on the *tapis*, and a deputation to Government to inculcate the urgency of preventive legislation having been determined on by the Medical Society of London, it may not, perhaps, be deemed inopportune for those who have met with well-marked or specially instructive cases to place such experiences on record. By so doing they will, perhaps, fortify the hands of that Committee. If you concur in this view, you will permit me to report in your columns, as briefly and with as few comments as possible, two cases which have occurred to me, in which there could be no doubt as to the diagnosis, and which are, I think, especially instructive, inasmuch as they are examples of acute poisoning accidentally supervening on, and thereby fully elucidating, the chronic form. They suggest the possibility, at least, if not the probability, that, from lack of such elucidation, chronic poisoning by arsenical wall-paper not infrequently escapes recognition.

In the first case, a husband and wife had for a considerable period suffered from indisposition, chiefly characterised by want of appetite, occasional sickness, and slight diarrhœa, and at last, in the belief that somehow or other the place did not agree with them, they went into the country, to recruit health, on a visit to their friends. They soon got well; but having had recourse to a decoction of milfoil (*Achillea millefolium*), of local repute in such ailments as theirs appeared to be, they attributed their speedy recovery in great measure to the virtues of that herb, and on coming home brought with them a supply of the presumed specific, which they disposed of, in readiness for future use, by hanging against a papered wall. It was not long before it was thought desirable to test its qualities anew, for the old symptoms returned. A decoction was prepared and imbibed. The wife, engaged in household avocations, soon felt sick, and vomited up most, if not all, of her portion. The husband, less fortunate, lay down, had a long nap, and awoke with severe pain in his stomach and bowels, followed by sickness, cramps, and diarrhœa. I was called in, and found him almost in a state of collapse, suffering from all the symptoms of arsenical poisoning. I will not enter into details of treatment and progress, but merely state that he had a narrow escape with his life. A glance at the unglazed green paper covering the wall of the room explained the whole matter. The primary indisposition, which induced them to seek refuge and health in the country, was really chronic arsenical poisoning. They, of course, got well when removed from the pernicious influence, but relapsed on returning to their poison-clad dwelling, and the milfoil, covered with arsenical dust, administered the *coup de grâce*.

The second case is that of two children, who in the morning before breakfast were seized with vomiting, cramps, and diarrhœa. No cause for such an attack could at first be assigned; but a bright-green wall-paper afforded a ready clue, and inquiry elicited that they had been amusing themselves while in bed by redecorating the wall of their apartment after their own primitive fashion. The process consisted in dissolving the colouring matter in saliva, and then applying it to the part to be operated upon. As the fingers carried the solvent, and did duty also as impromptu paint-brushes, the embryo artists transferred a poisonous quantity of arsenic to their own mucous membranes. However, they survive, and may, perchance, again distinguish themselves. Here, too, there was a history of chronic arsenical poisoning preceding the acute and nearly fatal attack; for the little patients had for some time suffered, off and on, from conjunctival irritation, spongy gums, capricious appetite, and other minor evils which, if I recollect aright, had not been deemed of sufficient gravity for submission to medical treatment. At all events, the cause of these ailments had never been suspected.

Yours &c.,

Brighton, May 3rd, 1879. JOSEPH STEPHENS, M.D.

TERRITORIAL QUALIFICATIONS.

WE thought that the day of territorial qualifications had passed away; but it seems not to be so. An interesting little experiment at Twickenham—involving both a cottage hospital and a dispensary,—entitled the Twining Hospital, and dedicated to St. John the Baptist, is to be tried, and the consulting physician and surgeon are to reside in London, and "to be on the staff of King's College Hospital." Such is the 38th general rule. We cannot understand or justify such a limitation. The physician actually chosen is admirably fitted for any hospital duty; but he would not be less so were he to transfer his relations to the University College or to the Middlesex Hospital, as some of his predecessors have done before. We believe he would be among the first to disapprove such sectarianism in medical charities.

STRANGE FREAK OF NATURE.

To the Editor of THE LANCET.

SIR,—The following singular phenomenon may be of interest to some of your readers. The facts as given appear in a Wrexham paper of last week:—

"A hen at a house in Llanferras began to lay early in the season; but after laying a few eggs she suddenly left off and in time grew very fat. Finding she did not lay, the proprietor killed her, and on opening the body was astonished to find two perfect chickens, with feathers on them, within her."

Can any of your readers suggest any explanation of so novel an occurrence?

Yours truly,

Manchester, April 21st, 1879. R. E. A. D

GRADUATION AT ST. ANDREWS.

R. M. P.—The number of gentlemen admitted to the degree of M.D. at St. Andrews is limited by existing regulations to ten in one year. If our correspondent has seen a list containing the names of more of such graduates, the list is an incorrect one. He will see the correct list in our impression of to-day. As regards the name of one gentleman in the list, but who is said in the Medical Directory of 1879 to have graduated at St. Andrews in 1878, we are informed that he did pass the examination last year. As there were twelve candidates who did so, two had to wait for their degrees till this year. The gentleman in question was one of these, and, we are informed, was incorrect and irregular in describing himself as M.D. of St. Andrews in 1878. Eight candidates passed the examination this year, leaving room for the two left over from 1878.

THE BONCHURCH DRINKING FOUNTAIN.

To the Editor of THE LANCET.

SIR,—With the report of Professor Wanklyn the question of the purity of the Bonchurch Fountain water has come to a stop; that is to say, while Dr. Frankland and, independently of him, myself have declared the water to be of a suspicious nature, Mr. A. Angell and Professor Wanklyn hold it to be good and of great purity. Will you allow me, as one of the analysts concerned in the matter, to explain that all four analyses have furnished results very fairly concordant, and that the difference is entirely one of opinion, and due to the different weight attached by different chemists to the data furnished by the analysis.

About the absence of anything like considerable quantities of organic matter in the water we all agreed; but whilst Dr. Frankland and myself were of opinion that on account of the presence of very notable amounts of chlorides, sulphates, and especially of nitrates, the purity of the water should be doubted, Messrs. Wanklyn and Angell entirely ignore their significance. The importance of these constituents becomes the more apparent when a comparison is made between the Bonchurch water and the Ventnor and Shanklin water supplies on either side of it, derived from the same strata of rocks in the immediate vicinity. Both the Ventnor and Shanklin waters are of great purity in every respect. The Bonchurch Fountain water is loaded with chlorides, sulphates, and nitrates. Add to this fact that there are old cesspools and buildings immediately above the fountain, and the suspicion resting on the water becomes so strong that it cannot be prudently ignored. I venture to predict that if the drains and cesspools of the buildings referred to are looked after, the purity of the water will soon equal that of the neighbouring supplies.

I have only to add that when I made my analysis and presented my report I was entirely ignorant that any cases of typhoid had occurred at Bonchurch, and that the water was suspected as the cause. My opinion must therefore have been absolutely unbiased.

Yours obediently,

Holborn-viaduct, May 6th, 1879. OTTO HEHNER, F.I.C., F.C.S.

INDIA-RUBBER TRACHEOTOMY TUBES.

To the Editor of THE LANCET.

SIR,—Referring to the letter of Mr. Morrant Baker in your last week's issue, as original makers of the india-rubber tubes for him, we have supplied a great number during the past three or four years to the profession in all parts of the world. They have all been made with the canvas lining, and in no single instance have we had the slightest complaint against them. We had the pleasure of showing Mr. Morrant Baker, some twelve months since, one that had been worn by a man (a patient of St. Thomas's Hospital) for a period of thirteen months with the greatest comfort, and we frequently hear of their being retained from seven to ten days without removal.—We are, Sir, yours &c.,

St. Thomas's-street, Borough, May, 1879. MILLIKIN AND DOWN.

DANDRUFF.

To the Editor of THE LANCET.

SIR,—In answer to your correspondent, inquiring the best treatment for dandruff or eczema furforans, I recommend the following mixture:—Iron wine, one ounce and a half; syrup, three drachms; Fowler's solution, one drachm; water, two ounces: one drachm three times a day in water after meals. And the following ointment to be applied thoroughly between the partings of the hair:—Red oxide of mercury ointment, four drachms; benzoated lard, one ounce and a half; essence of bergamot, two minims. Perhaps your correspondent will kindly give the result of the treatment.

Yours obediently,

Streatham-hill, May 6th, 1879. PURNELL PURNELL.

To the Editor of THE LANCET.

SIR,—I would strongly recommend "M.R.C.S." to try the Turkish bath. I know of at least two cases which resisted both lotions and ointments, but disappeared entirely after a few baths. In both cases the disease had spread over the face, the infection, no doubt, being carried by the nails.

Yours &c.,

Edinburgh, May 3rd, 1879. C. F. N., L.R.C.P.E.

To the Editor of THE LANCET.

SIR,—If "M.R.C.S." will try a preparation of bay rum for scurfiness of the scalp, I think he will be more than gratified with the result. In my own case, it has acted almost as a specific.—Yours faithfully,

May, 1879. R. M.

Dr. Campbell.—John Hunter died in 1793. His widow, the sister of Sir Everard Home, Bart., died in 1821. An obituary of this lady appeared in the *Gentleman's Magazine*, January, 1821, page 89. Her poems were noticed favourably in the *British Critic*, October 1802, and with some, though perhaps not undue, severity in the *Edinburgh Review*, vol. i., page 421. The late Mr. Clift, the first and only apprentice of John Hunter, most certainly was *not* a natural son of his illustrious master, although very like him in many respects. Mr. Clift was born at Bodmin, Cornwall. His only son met with a fatal accident in Lincoln's-inn-fields, and his only daughter, who married Professor Owen, died a few years ago.

NITRITE OF AMYL IN SEA-SICKNESS.

To the Editor of THE LANCET.

SIR,—I notice a letter from Mr. Dingle in the last number of THE LANCET, in which he refers to the use of "nitrate" of amyl as a cure for sea-sickness, and wishes to know whether others have found it so successful as he has himself.

In the years 1875–76 I was surgeon to the Union Steamship Company, and made some voyages to the Cape in the steamship *Syria*. I always carried nitrite of amyl with me, and found it the only remedy of much value. Last year I sent a full account of some of my cases to Dr. Ringer, and he said he would notice it in the new edition of his valuable work on "Therapeutics." I have by me notes of cases of most severe sea-sickness—in one at least life being endangered,—which were cured by the inhalation of from three to five drops of nitrite of amyl. I am unable to remember when I first heard of the application of this medicine to sea-sickness; but I think it was in a letter from some surgeon in the navy or merchant service, which appeared in THE LANCET in 1874 or early in 1875. It is the *only* remedy I have found of any use. In many cases of commencing sea-sickness, with the violent headache and never-to-be-forgotten feeling of misery accompanying it, I found it to bring on immediate sickness, with relief of all the symptoms. I saw no ill-effects following its use in any case.—Yours truly,

GEO. ERNEST ALFORD, M.R.C.S. Eng., &c.

Weston-super-Mare, May 6th, 1879.

To the Editor of THE LANCET.

SIR,—May I ask whether Mr. W. A. Dingle means nitrate of amyl when he mentions a drug of that name, or the nitrite ($C_5H_{11}NO_2$). This latter was placed in the Appendix of the British Pharmacopœia about three years ago; but I am unacquainted with the former, and should be interested to know if such salt of amyl exists.—Yours faithfully,

Mount-street, W., May 5th, 1879. ALFRED E. WOODS.

MEDICAL MEN AND THE CLERGY.

To the Editor of THE LANCET.

SIR,—I wish to add my protest, with your kind permission, against the custom of attending the clergy without charge, in which I can see neither reason nor justice. If "poverty" were an excuse for giving them our advice without fee, the poor members of other professions should be treated with equal consideration by us. Let us hope the *touting* system mentioned by your correspondent, "S.," is not at the bottom of it!

Perhaps some of your readers, who may regard the clergy as if we were under a particular obligation to the Church, will be so good as to give us the benefit of their views.

The only exceptions I make to the usual charges are my medical brethren and their families; and governesses—a class I think are truly deserving of medical charity.—I am, Sir, yours faithfully,

May 6th, 1879. W. N. H.

ON THE TREATMENT OF DIPHTHERIA.

To the Editor of THE LANCET.

SIR,—Whilst according entirely with Dr. Kingsford as to the internal use of iron and chlorate of potash and the need for liberal and oft-repeated nourishment in cases of diphtheria, I would, nevertheless, insist more urgently than himself upon the value of the local application of the perchloride of iron and glycerine. I usually apply this three times and occasionally as often as four times a day, with, as I believe, expeditious results. The application seems to prevent further extension of the membranous deposit, causing it as well to pucker and be more readily separated—an end assisted by generating continually within the room a vapour of steam and carbolic acid.

I am, Sir, yours obediently,

Dalston, April 30th, 1879. F. E. COCKELL, Jun., M.R.C.S.E.

THE FELLOWSHIP OF THE COLLEGE OF PHYSICIANS.

To the Editor of THE LANCET.

SIR,—I have read with some surprise the list of members upon whom the Fellowship of the Royal College of Physicians has recently been conferred. Of the twelve names, *nine* are those of gentlemen resident in London, two in France, and *one* in the provinces. Every large town—Liverpool, Birmingham, Manchester, Leeds, Newcastle,—all with their schools of medicine, are left out in the cold, and St. Leonard's is selected to represent provincial medical talent. It is not difficult to understand how the College in her councils is ceasing to be in any way representative of the country, whatever it may be of the metropolis.

Your obedient servant,

A PROVINCIAL FELLOW OF THE ROYAL

May 1st, 1879. COLLEGE OF SURGEONS.